Gleanings in Bee Culture

October, 1948 Vol. 76, No. 10

The American Honey Institute

By Phyllis Rasmussen
The Institute is the Beekeeper's Best Friend

Mrs. Harriett M. Grace, the very capable Director of the American Honey Institute

"....Meet me in Chicago...." Those were the four words that proved to be the "Open Sesame" to the founding of the American Honey Institute, the organization that you've selected to tell the public about your Honey. This is how it happened:

In 1928 a chemist, Dr. H. E. Barnard, got in touch with Mr. Lewis Parks of the G. B. Lewis Company at Watertown, Wisconsin. "Mr. Parks," he said, "I am in the baking powder biscuit business. You are in the Honey business. Why not spread your Honey on my biscuits?"

"If interested, meet me in Chicago on the 18th."

Mr. Parks snapped up the idea. Here was a chance to promote Honey by working closely with another food industry. At that Chicago meeting it became quite evident that not only **once** as in this case could Honey be emphasized through cooperation and promotion but **over** and over again. It became evident that Honey was a food that needed promotion, that needed to be displayed and paraded before the wandering eyes of the public.

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But how? How to bring the valiant but small efforts of all of America's beekeepers together into one concerted drive to sell Honey? How to make the American public constantly aware of its needs for Honey? How to bring America's potential Honey market to the heights it was capable of reaching?

The answer was simple: **The American Honey Institute.**

This newly-formed, non-profit organization was to have as its primary function the promotion of America's Honey to America's people. It was to educate the people to the uses of Honey. Twenty years later in 1948 the American Honey Institute performs not only this single service but also many others, all of which are directed toward Honey promotion.

When the Institute was set up in 1928 it was organized around a board of directors and a Director of the Institute with his office staff. The nine members of the policy-forming Board today are: Lewis W. Parks, Chairman, Watertown. Wisconsin; R. F. Remer, Vice-Chairman, Sioux City, Iowa; M. J. Deyell, Medina, Ohio; T. E. Burleson, Waxahachie, Texas; L. C. Dadant, Hamilton, Illinois; Woodrow Miller, Colton, California; M. S. Stone, Los Angeles, California; R. B. Willson, New York City; A. G. Woodman, Grand Rapids, Michigan.

Mrs. Harriett M. Grace, Director of the Institute, has done a remarkable job of pulling the Honey producer closer to his Honey market by means of an active and progressive program of Honey promotion. This program is worth examining. It has been so successful that other trade associations have followed the pattern of promotion set up by the American Honey Institute.

The American Honey Institute has divided its program into three sections: first, the direct public relations; second, the indirect approach to public support of Honey; and third, the direct contact with Institute members.

The first of these, the direct public relations, is an extensive publicity program. This is the part of the program that gives the knockout punch to any sales resistance the consumer might have. It is aimed directly at Mr. John Q. Public so he can't escape its influence.

Prime among the media used to fulfill this first function of the American Honey Institute are the newspapers, magazines, and radio stations throughout the country. Honey releases are continually and periodically sent to these agencies. The releases are timely, unusual, and eye-catching news articles which of course feature Honey. To judge from their wide use and to read letters from food editors praising their value and readability, these releases offset the time and work which the Institute spends in preparing them and pays dividends in actual Honey publicity. Never a day goes by that the tear sheets do not come to the office from papers all over the country showing the columns of our Honey releases. Today a radio script from the Illinois Extension Service on one of our Honey Cookie recipes was brought to us by an outsider who knew we'd be interested in seeing it.

It is practically a certainty that all of America's beekeepers either have seen or have copies of the leaflets and booklets that the Institute publishes. **"Show her HOW"** is the motto of the Institute when recognizing the fact that no woman is going to buy Honey unless she knows what to do with it. The booklets are distributed through two means, direct distribution to the housewife, and indirect distribution by supplying the beekeeper who in turn gives the leaflets to his customer.

It is pertinent to note here that the Institute refuses to use any recipes which have not been tested. Facts and only true facts are the hard and fast rule at the office. No story, no recipe, no information may leave the office unless it has been properly verified. For example, the Institute obtained the seal of acceptance of the Council on Foods and Nutrition of the American Medical Association for its nutrition booklet called "Honey" so that the American public can have faith and confidence in the integrity of the American Honey Institute. Several other of the publications also have merited the seal.

Prestige is given to the booklets by the eminent professional men who write the prefaces for them. For example, Dr. Morris Fishbein, founder of the American Medical Association, wrote the preface for "Honey", while Dr. Franklin Bing,

President of the American Institute of Baking, wrote the preface for "Honey Specialties for Bakers".

An illustrated list of the leaflets and books which the Institute publishes may be had for the asking. It would be worthwhile to send for this list and take advantage of this service by ordering now.

One move in a checker game always leads to three or four more. One move at industry cooperation has led to hundreds more. Mrs. Grace constantly is in touch with other food industries, cooperating with them to work for tie-ups between their product and yours. To

Virginia McNaughton, Home Economist

spread Honey on biscuits was only a starter; the follow-up has been promotional displays of cereals and Honey, grapefruit and Honey, milk and Honey, oranges and Honey, cranberries and Honey—and so on and on to greater Honey publicity. Industrial cooperation is a means of promotion that is steady and continuous. It grows more and more influential with each connection.

Direct advertising is one of the greatest means of American publicity. It is an effective means, but a tremendously expensive means. To get the most out of the beekeepers' money the Institute has launched a program of professional advertising in professional magazines like **Hygeia, What's New in Home Econom-**

Caryl Vetter, Bookkeeper

ics, The Journal of the American Dietetic Association, Forecast, and **the Journal of Home Economics.** By reaching the people who read these magazines—teachers, doctors, dietitians, nurses, home demonstration agents, home service directors, home economists, who in turn influence others—the Institute is making double use of the same amount of money. It is spending five cents to buy ten cents worth of goods; one ad to reach twice the ordinary number of people.

What results do we get? Clipped coupons from the ads arrive in every mail; every outgoing mail carries the booklets and information that they request. Professional ad-

Answering inquiries

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vertising pays richly in increased Honey awareness by the public.

Direct public relations work also crops out in special magazine articles that are written for national publications, special radio programs over national hookups, speeches by members of the Institute staff at beekeepers' meetings and conventions, and help in state fair exhibits. A recent national radio program by Mrs. Grace brought so many new requests for literature that additional office help had to be employed to fill them. Help given to a home demonstration agent recently received this welcome reply:

"I wish to thank you for the wonderful material you sent me on Honey. It has really been a life saver for me, and my speech is near completion now. If I can be of any help to you at any time please call on me".

Remember National Honey Week last October and Honey for Breakfast Week starting Easter Sunday? Both of these are sponsored by the Institute which sends out special publicity and literature gratis or at cost for these periods. Some of the special material designated for these Honey weeks is in the form of window posters and streamers as well as special recipe broadcasts, news items, notices to home demonstration agents, home service directors, teachers, dietitians, food page editors, and syndicate writers.

Now for indirect approaches to public support. Fascinating is the only word to describe the Institute's program of scientific research on the vitamin content of Honey. Results of the research along with information on minerals, sugars, and other components of Honey are published in recipe books as well as in special articles. Currently another study of Honey is being made at the University of Wisconsin under the direction of Dr. C. A. Elvehjem, biochemist of world fame. The value of such a program is intangible; one cannot say, "I sold so many containers of Honey because of the scientific research that has been done." But the value of such a program is priceless to the reputation of the Honey industry as a whole and the benefit of man.

Fifty four percent more readers are attracted to a story with a recipe than to a story without one. The American Honey Institute recognizes the value of its recipes and accepts only those that have been properly tested. Research on recipes is imperative to an organization such as the Institute which uses them to support its publicity program.

It is the motor of an automobile that actually moves the car, but where would the motor be without gasoline? It is the beekeeper that supplies the Honey market, but where would a well-supplied Honey market be without the American Honey Institute to create demand? The Institute knows that its promotional activities are invaluable to the Honey market, but it also offers services to the beekeeper himself. Once a month the Institute sends to its members a Member's Bulletin complete with marketing information, price news, and latest Honey recipes. It acts as a clearing house for Honey information both for the public and the beekeeper. Constant contact with new business trends keeps the Institute alert to new ideas for Honey marketing. Finally, it solicits funds from the beekeeper to enable the Institute to continue its program of Honey promotion.

"Sounds fine," you probably are saying to yourself, "but are you getting any results?"

We've left the best for the last. The results have been exceedingly gratifying. Let's take a look.

*For just the Old Favorite Honey Recipe Book over 100,000 pounds of paper have been used—that's 50 tons of recipes! And that because of the great public demand for that one book!

*In a recent recipe book published by a Chicago newspaper 48 of the 54 recipes were Honey recipes from the Institute!

*The New Favorite Honey Recipe Book, in print only one year, has already consumed 17,000 pounds of paper!

*Proof that our news releases are used is the many tear sheets that are sent to the office. Although the Institute will not pay for a clipping service, tear sheets come in every mail.

*The top executive of a large medical supply corporation recently took time to write Mrs. Grace and tell her what a fine two-page spread

The Mimeograph machine is kept busy day after day

the **Phoenix Flame** carried about Honey.

*Over 1500 responses to an ad in **What's New in Home Economics** were received at the office within two weeks! The Institute mailed Honey information to these people.

*Proof of excellent results is also found in the recognition given the Institute by the War Food Administration and the award presented by the American Trade Association Executives for "having rendered outstanding service to the industry which it represents as well as to the American public".

Results? ..Yes, the Institute is getting them. We like to tell of the Minneapolis postman who came to the offices of the Institute the other day because he'd seen the literature going through the mails and he wanted to see the organization that put out such excellent material.

The secret of success for the American Honey Institute lies in several factors. Its program of promotion is based strictly on facts, leaving no room for doubt of the validity of the Honey claims. It stresses an educational program through home demonstration agents and schools, thereby creating in the public a more lasting impression of Honey than one quick glance at an advertisement would leave. It keeps its standards high, never bringing its publicity campaigns into the realm of underhandedness. It determines and interprets the needs of the consumer and thus can direct its publicity to the right place.

Perhaps the greatest result of the program of the American Honey Institute has been the acceptance of the Institute by the consumer. This consumer approval is the logical outgrowth of a steady, healthful expansion by the American Honey Institute. From 1928 to 1948 growth has been even and continuous, not spasmodic. Influence on the Honey market has been great; with the continued help of the beekeeper—much greater!

No longer is it "Meet me in Chicago". Today industrial men and women, Honey packers, advertisers, home economists, beekeepers — all, say "Meet me at the American Honey Institute — the fulcrum of the Honey Industry".

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General wintering scene

Wooden cases with top entrances

To Winter or Not to Winter

By E. Braun

Agricultural Scientist, Apiculture, Department of Agriculture, Experimental Farm, Brandon, Manitoba, Canada.

The answer to this $64.00 question is not as simple as it appears on the surface and a dogmatic answer of "yes" or "no" will only produce much controversy among members of the beekeeping industry. Therefore, at the request of the editor, I have undertaken to analyze the pros and cons and to support the arguments with the latest known research data, which has been accumulated at the Dominion Experimental Farm, Brandon, Man., over a decade or more of experimentation with package bees and overwintering methods.

There are certain factors which farmers and commercial beekeepers stress when they are arguing for the continued use of package bees. These can be enumerated as follows: uniformity as to size, arrangement of equipment, hiving, feeding, methods of manipulation, removal of the crop, and extermination at the cessation of the honey flow. The financial returns in the years of good honey flows and the general prices obtained for the finished product are deemed sufficient for the amount of investment and labor involved. The most frequent criticisms are: too early or too late arrival, overheating or chilling while in transit, underweight or old bees in the packages, virgin or poor quality queens, too much supersedure, too slow in building up for the honey flow which came earlier than anticipated, or to blame unsatisfactory weather conditions which existed in the particular area.

The favorite arguments by these same beekeepers against over-wintering may be briefly enumerated as follows: too much work to requeen, prepare, and pack for winter; the value of 55 pounds of honey left for feed may purchase two packages the following spring; the winter loss is too high and the colonies that survive in the spring do not produce sufficiently in excess of package bees to warrant the extra risk involved. Furthermore, they feel that they cannot leave their bees unattended throughout the winter without extra care and attention.

There is fairly general agreement among beekeepers that package bees have a definite place in the beekeeping industry in the northern States and Canada for specific purposes, such as replacement in case of extermination of entire apiaries through disease, for extra rapid expansion of apiaries or colonies to be handled, or for the purpose of starting beginners in beekeeping on a firm and healthy footing. Many proponents of package bees, however, forget the fact that the package bee industry, from a historical viewpoint, is literally an infant of very recent birth in the long and

varied career of beekeeping. Established colonies, swarms, nuclei, and package bees are roughly the sequence of methods that have been employed from ancient time to the present day to start beginners, increase apiary size or to assist in pollination enterprises.

Over-wintering Colonies versus Package Bees

An experiment was begun in 1925 to compare the cost of over-wintering a certain number of colonies outside in cases, their honey production, and complete financial returns with the cost of a certain number of packages and their complete financial returns. The following basis was used for the computations: **Over-wintered Colonies:** (a) labor required to prepare and pack for winter; (b) stores required for fall feeding: (c) interest at 6 percent on the cost of the packing cases; (d) labor required in spring to unpack and manipulate; (e) food required in the spring, loss of colonies during the winter, total cost; (f) value of increases made; (g) value of honey crop produced and profit per colony. **Package Bees:** (a) cost of packages, transportation, taxes; (b) value of loss in transportation (queens dead on arrival or loss in introduction); (c) cost of labor to establish in hives; preparing hives, feeding, and other time involved: (d) cost of feed in the spring; (e) loss of queens through supersedure, total cost of packages; (f) number of increases made from packages, total honey crop produced, and profit per colony. The figures obtained provide some interesting data which are given in the following table:

Balsam wool with top entrance

Unprotected group

Twelve Years' Figures on Profits Produced from Outside-wintered Colonies Versus Package Bees.

Year	Outside-wintered Colonies			Package Bees		
	Number of Colonies	Total Cost	Total Value of Production	Number of Packages	Total Cost	Total Value of Production
1925-26	21	$124.15	$536.38	24	$167.69	$289.19
1926-27	21	123.66	307.53	12	102.07	206.70
1927-28	22	153.82	624.20	12	86.93	181.87
1928-29	31	145.25	503.70	33	191.89	796.46
1929-30	31	141.69	621.42	14	91.61	169.90
1930-31	31	113.87	486.52	12	64.17	200.70
1931-32	31	101.86	306.12	6	31.12	54.60
1933-34	31	253.93	394.50	25	133.94	256.10
1934-35	11	65.50	128.50	20	87.53	183.72
1935-36	11	81.77	274.80	32	148.84	772.60
1936-37	11	60.84	165.15	32	130.77	335.35
1937-38	11	63.88	179.83	32	133.34	449.42
Total	263	1,430.22	4,528.65	254	1,369.90	3,896.61
Total Profit			3,098.43			2,526.71
Average Profit per Colony			11.78			9.95

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The difference of $1.83 in favor of the over-wintered colonies should dispell the theory that it is cheaper to kill colonies in the fall and buy package bees in the spring than to over-winter the colonies of bees in the Province of Manitoba.

Although production figures do not give a true picture of wintering results they indicate the general trend for the financial computations. The following table shows the average production data for the twelve-year period:

with 43.8 pounds for the cellar-wintered groups. Therefore, from a food standpoint, outside-wintering is more economical than cellar-wintering. The average spring strength is in a ratio of 9 to 7 frames covered by bees at the first examination in the spring, in favor of the outside-wintered colonies. This increased spring strength in bees together with the brood available is approximately equal to a two-pound package of bees when installed.

The increased spring strength is

Twelve Years' Average Production Figures from Outside-wintered Colonies Versus Package Bees.

Year	Outside-wintered Colonies		Package Bees	
	Number of Colonies	Average Production lbs.	Number of Packages	Average Production lbs.
1925-26	21	150.34	24	77.11
1926-27	21	125.21	12	113.87
1927-28	22	175.12	12	100.29
1928-29	31	156.10	33	198.45*
1929-30	31	209.00	14	121.35
1930-31	31	179.84	12	185.83*
1931-32	31	126.61	6	121.33
1933-34	31	181.84	25	96.84
1934-35	11	110.54	20	91.86
1935-36	11	226.72	32	241.42*
1936-37	11	150.13	32	104.79
1937-38	11	172.52	32	175.55*

The production averages show that the package bees exceeded the over-wintered colonies in only four of the twelve years of the experiment (1929, 1931, 1936, 1938). In each of these four years the main honey flow continued for a longer period of time in the fall than was the general rule.

Computing the average production of the cellar-wintered colonies and adding the same to the outside-wintered colonies provides the following data:

particularly advantageous when spring division of over-wintered colonies is practiced. Experiments have shown that strong over-wintered colonies left undivided produced an average of 173 pounds as compared with 285 pounds from a similar strength group divided in early May. The honey crop yield from the parent colonies divided was 182 pounds and the increase portion 102 pounds, showing that production was not reduced but slightly enhanced through the dividing pro-

Twelve Years' Average Production Figures from Cellar and Outside-wintered Colonies Versus Package Bees.

	Cellar and Outside-wintered Colonies		Package Bees	
	Number of Colonies	Average Production	Number of Colonies	Average Production
1926-38	735	171.56	253	144.16

The difference of 27.40 pounds per colony in favor of the over-wintered colonies would be within 15 pounds of supplying the food stores required for wintering purposes.

Ten years' data (1935-46, Gleanings in Bee Culture, Vol. 11, 1947) show that the average loss in weight (from the time feeding is completed in September until the colonies are removed from winter quarters) is 42.6 pounds. The outside-wintered colonies average 40.9 as compared

cedure over a six-year period. The data, over a long period of years, shows that approximately two thirds of all over-wintered colonies can and should be divided in the spring for maximum honey crop production. The winter loss sustained, which averages approximately 15 percent, may therefore be readily replaced, together with additional colonies for the production period to provide greater financial returns to the beekeeper than those shown in

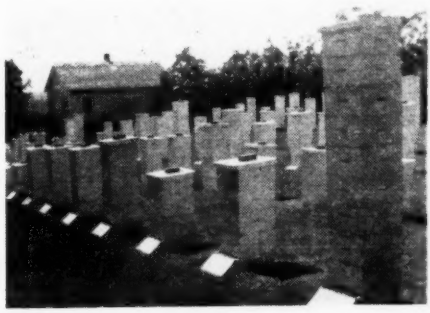
the tables at the beginning of this article, when the making of divisions was not practiced.

Cheap, efficient, outside - wintering packs using top entrances are readily available and can be applied by a beekeeper and a boy assistant in early October at the rate of 100 colonies per day. The time and labor factor would therefore be about equal to that required to kill off, shake out the dead bees, and store the equipment in the fall.

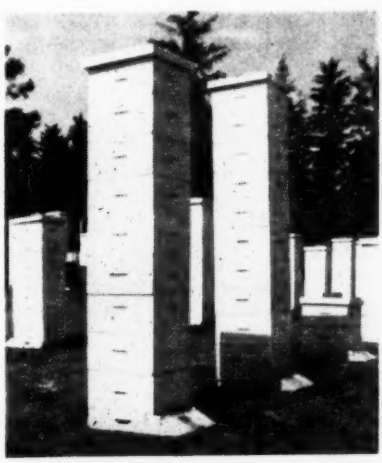
Approximately 20 pounds of honey in the combs should be saved each fall for every package colony that is to be installed the following spring. Assuming — although the amount is actually less—that the same amount of stores are required for the over-wintered colonies and their increase, this food cost factor could be counter-balanced between the over-wintered colonies and package bees. The difference then must be largely in the production factor between over-wintered colonies and package bees.

Late arrival, poor condition, old bees, dwindling, early supersedure, and poor queens are faults generally attributed to the package shippers, and failing these factors there are always the unfavorable weather conditions to fall back on as excuses for a low production in package bees. The fact remains that late arrival may be a contributing cause if the bees arrive any time after a six-week period prior to the starting of the main honey flow. Poor condition on arrival is generally attributable to the transportation agency and not the shipper. Old bees are literally a misnomer in package bees; no reliable shipper would indulge in such practice and even if he deliberately tried to do so, he would only be able to ship bees from colonies which had been queenless a long period of time and in limited quantities only. Dwindling is primarily due to lack of stores, both honey and pollen, or sugar syrup when used instead of honey. Lack of drawn comb, equipment in poor condition, or forcing bees to unnecessary flight activity by feeding sugar syrup may also be contributing causes for spring dwindling. Lack of shelter from the wind (but not necessarily lack of heat) causes more dwindling than usually suspected. Early supersede-

Top entrance in one of the hives in the unprotected group.



Over-wintered colonies and their increases, August, 1945. (No package colonies.)



Parent colony and increase

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dure, the cause for which has not yet been discovered, and which has caused from 10 to 90 percent of the losses in package bees is the largest single factor in lowered production among package bees. In large commercial yards the doubling up of package colonies is rarely less than 20 percent and occasionally exceeds 50 percent. This is probably an inherited factor and therefore a breeding and selecting problem requiring a long term research program to reduce or eliminate. Queens vary tremendously even in the same strain. The rigid selection program practiced in the 20's has been discarded for mass production and this has affected production on both over-wintered colonies and package bees, and probably has had a slight effect on successful wintering.

The ten-year summary showed that package bee colonies over-wintered more successfully than increase colonies, wintered as well and had similar spring strengths as previously over-wintered colonies. It would therefore appear tenable that the beekeepers, both in the North and the South, and not the bees are largely to blame for many of the ills that beset the beekeeping industry. Fewer colonies more carefully tended, a greater acquisition of the known principles in beekeeping by the majority of the beekeepers, and the application of strict business methods instead of bee lore would achieve a greater advancement in the beekeeping industry. Over-wintering, or maintaining colonies between honey flows must be practiced either in the South or the North. Stability for the beekeeping industry can only be maintained by a proper proportion between the number of colonies that are over-wintered and the package bees that are operated. In the older beekeeping areas, like Ontario and Quebec in Canada, over-wintering is more generally accepted than in the prairie provinces. Examination of honey production records over a period of years will show a fairly consistent annual production in the eastern provinces which leads to stabilized marketing, while the prairie provinces' annual production fluctuates rather violently, causing disruption in prices, marketing, and consumption. Therefore, I am of the opinion that the beekeeper who intends to make beekeeping a profession will definitely profit by over-wintering. The get-rich-quick, in-and-out type, or itinerant beekeeper will kill off his colonies and take whatever he can on a season-to-season basis. All too frequently the beekeeper who is entirely dependent upon package bees strikes a combination of factors which either forces him to operate on a money-losing basis or eliminates him entirely from the beekeeping field. The same condition may also affect a beekeeper who over-winters but generally he can reestablish himself with package bees in a short space of time.

In both cases the credit or finances available will determine the rapidity with which the apiaries will be established. Therefore, the question "To Winter or Not to Winter" is entirely dependent upon the beekeeper and his attitude towards the stability of the entire beekeeping industry.

Parent colonies—races of bees—divided

Increases, races of bees

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Lorenzo Lorraine Langstroth

By Dr. E. F. Phillips

(Continued from September)

The story of Quinby's adoption of the Langstroth hive is interesting. Quinby published an excellent book on beekeeping in the very month that the Langstroth book appeared and the two authors were quite unaware of each other. In Quinby's first edition appears a tirade against patent hives and a warning to his readers that it is unwise to buy rights to use patent hives. This warning was in general more than justified, for at the time the market was flooded with worthless hives, each with some special and utterly false claim of superiority. Quinby was a Quaker, and one tenet of his personal belief was that if God permits one to make a discovery or invention, there is a moral obligation to give it without money and without price to mankind. It was then something of a shock to Quinby to learn, first, that Langstroth had patented his hive, and secondly, that the Langstroth hive was really a vast advance over any previous hive. He arranged to test it, but it was not until 1858 that he inserted anything about the Langstroth hive in his own book. Then he put an appendix to one edition in the smallest type that I ever saw used in a book, concerning the Langstroth hive, but he did not hesitate to admit that Langstroth had brought about a great advance in the industry.

Later A. I. Root, Medina, Ohio, began beekeeping, learned of the Langstroth hive and adopted it, and doubtless did more to make it known, to standardize its manufacture, and to promote its use than any other of the earlier users of the invention. Others took it up and today a hive on the very dimensions advised by Langstroth and with the exact form of construction is used by at least 95 percent of the beekeepers of the continent.

A hive of identical plan but of smaller dimensions is standard in the British Isles; a hive somewhat larger than the Langstroth dimensions on the same plan is used throughout the Low Countries: France, Spain, Italy, the Balkan states, and Russia. The same hive used in the United States is virtually standard for South Africa, Australia, New Zealand, and the rest of the beekeeping world. German-speaking beekeepers use a frame hive but theirs usually opens at the back instead of the top. The names of various other beekeepers have become attached to a number of hives because of some minor feature which they advocated, but they are all essentially Langstroth hives, and the name of Langstroth is known everywhere and respected everywhere as the originator of the hive that made modern beekeeping possible.

To relate the full story of the hive and the difficulties associated with the patent would require more time than is available to us. Almost numberless people undertook to make a hive which would involve the principle but not be covered by the patent, with the result that beekeeping was flooded with worthless equipment. Finally suit was brought against the worst infringer in the name of Otis, to whom rights for the western states had been sold. The suit was never decided by the court because the defendents made so poor a showing that when Langstroth became ill of his old trouble during the proceedings, it was decided not to push the case. By common consent, Langstroth was the winner. Books marked as Exhibits in the Trial are preserved at Cornell University.

I have enlarged on this invention because it is the most striking contribution that Langstroth made to beekeeping, but by no means the only one. It is even doubtful whether in the final analysis it was more important than other contributions. A second undertaking to which he gave years of labor was the introduction of Italian bees into this continent. S. B. Parsons, Flushing, Long Island, among others, brought Italian bees to our shores, but it was only by the untiring labors of Langstroth that their desirable qualities were realized, that methods adopted to the peculiarities of this race of bees were evolved, and that queens were distributed widely enough to make their merits known. Page after page of his Journal was

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devoted to a record of the problems that he and Parsons encountered in this undertaking. Methods of rearing queens were not then developed, but with a broad general knowledge of bees, he managed to rear queens despite one misfortune after another. The Journal record of this work is not published, but it is great reading. The Parsons importation was made in 1860, by which time Langstroth was no longer living in Greenfield. He went to Flushing and remained there for some time to work with Parsons, then later transferred his work with Italian bees to his Ohio home.

During his second period of residence in Greenfield, Langstroth spent much time with his close associate, W. W. Cary, at Colraine. From his return to Greenfield in 1852 until he left for Ohio in 1858, he supplied the pulpit of the Congregational Church at Colraine the larger part of the time but was never the regular pastor of that congregation. For several years of his stay in Greenfield his wife was not with him, but the family was finally united here. In 1858, one of his three remarkable brothers-in-law, Aurelius B. Hull, Morristown, New Jersey, purchased a house in Oxford, Ohio, which he turned over to the Langstroth family as their home. The brick house in which they lived in Oxford still stands, virtually unchanged. It is now on the campus of the Western College for Women and is used as apartments for members of the faculty. It is still known as Langstroth House. With the house went eight acres of land, and here Langstroth established an apiary and here he worked out many problems reported in the later editions of his book. Next door lived another beekeeper, and with advancing years the two old friends spent many hours on the front porch. Some years ago when I visited Oxford, a resident of that delightful town took me to this house next door and showed me some grooves in the porch floor. He said that he could not prove it, and in fact had no evidence at all of the accuracy of his guess, but he felt sure that those grooves must have been made by Langstroth as he rocked vigorously on the porch as heated arguments developed. The Langstroth family remained in Oxford for many years,

The Langstroth home in Oxford, Ohio

but one misfortune after another plagued them.

Langstroth's son John gave promise of becoming his father's sturdy support in his beekeeping work, but just about the time that the son was able to help, he enlisted in the Union Army and spent the remainder of the war period in the service. On his return home he became ill and died in 1870 of tuberculosis contracted while in the Army. His daughter Anna married an Oxford boy, H. C. Cowan.

In 1872 Samuel Wagner died, the man with whom Langstroth had discussed time after time the need of a suitable journal devoted to beekeeping. In 1860 Wagner had started the American Bee Journal, but publication was necessarily suspended for months during the Civil War. Langstroth and Wagner remained close friends, and from this friend, Langstroth was able to get all the latest work on bees from European countries.

In 1873, Mrs. Langstroth died. During her last illness their daughter Anna returned home to care for her father, and for the rest of his life he resided with this devoted daughter and her family. In 1874 he sold his Oxford apiary and never again owned more than a few colonies. Periods of his recurring illness grew longer and more intense, but in his brighter periods he wrote, studied, and served as a great leader of beekeepers.

At about the time of his son's death, beekeeping had advanced to

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the point where it seemed essential that beekeepers be organized. That same year a small group in Michigan issued a call for a national organization. Meanwhile Moses Quinby had organized the beekeepers of the northeastern states, and another group had organized in Illinois. The call was for a meeting in Cincinnati, this place being selected because it was near the home of Langstroth and everybody felt that it was essential that he attend the meeting. Because of some confusion about arrangements, a meeting was held in Indianapolis, at which Langstroth was elected president of the national body. The meeting in Cincinnati seems to have been a rival affair, and it finally met in February, 1871, and here again Langstroth was elected president. The two groups merged shortly thereafter.

From the first meeting of beekeepers on a national scale, Langstroth was a regular attendant and also a regular speaker, for his council was always sought. From the first national meeting until the big meeting in Toronto in September, 1895, Langstroth carried more than his share of the burden.

While we today dedicate this tablet to the memory of Langstroth, this is not the only memorial to him. After his death, beekeepers erected over his grave in Woodlawn cemetery in Dayton a tombstone on which is engraved a tribute to him. Sincerely, if not with lapidary skill, and if not in the best of form, they expressed their thanks. Later beekeepers of Ohio and elsewhere established an item in the endowment fund of the beekeeping library at Cornell University so that books might be purchased as a memorial to Langstroth. A portrait of Langstroth was placed by beekeepers in the pastor's study of this church. Then by a rare good fortune beyond what one might ever expect, opportunity arose for the purchase of 18 books on beekeeping that are known to have been part of Langstroth's personal library, and in the same lot 26 others in the same editions which he owned. These are now in the library at Cornell University also, and a list of these books appears in Miss Naile's biography. When Miss Florence Naile was preparing the best memorial to Langstroth so far undertaken, in the form of a biography, she found that his personal journal and his letter press book were still preserved, and it was arranged that, through the generosity of his grandson, these also be placed with the other Langstroth treasures at Cornell. To complete the story as best we might, copies have been obtained of every article that Langstroth ever wrote, so far as they can be located, and these were presented to Cornell University also. There are also copies of correspondence between Langstroth and the Dadants regarding revision of his book. All this accumulation of Langstroth material is available to any person desirous to making any further study of the life and work of this great benefactor.

In 1887 Mr. H. C. Cowan's business made it necessary that he move his family to Dayton, Ohio. They left the Oxford home and did not return there. In Dayton as in Oxford, and as earlier in his various places of residence, Langstroth was an active citizen and especially was he active in the work of the church. He preached repeatedly in Oxford, and when the family moved to Dayton he established close associations with the Presbyterian clergymen of that city, and took an active part in the affairs of the presbytery. When the pastor of the Park Presbyterian Church left to take charge of a mission under the United Presbyterian Church, Langstroth transferred his church connections, because the mission had grown out of a Sunday School class taught by his son-in-law, H. C. Cowan. Langstroth also took an active part in the Dayton Y.M.C.A. and often spoke at their Sunday afternoon meetings. Except for the ever-present threat of his head trouble which bothered him more and more with advancing years, life was happy for him in these latter days.

In September, 1895, he felt better than he had for many years, so well in fact that despite his 85 years, he decided to attend the great gathering of beekeepers arranged in Toronto. His daughter, Mrs. Cowan, went with him, and at the meeting he seems to have had a most delightful time. He spoke at the meetings especially on his work with Italian bees which by that time were justly popular. He also spent hours in the lobby of the hotel visiting with old friends.

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On his return home to Dayton, he was tired from his trip but happy. Shortly after he came home, he was asked by Rev. Amos O. Raber, pastor of the Wayne Avenue United Presbyterian Church of Dayton, if he would preach at the communion service, Sunday, October 6. He gladly accepted, but felt it necessary to explain that his presence must depend on the state of his health. Before their conversation closed, he expressed his certainty that he would come. But having contracted a heavy cold, his daughter tried to persuade him to decline, but he would not. On the appointed morning he was bright and happy but tired easily, and again his daughter tried to dissuade him from going. His reply was: "Oh, yes! I will say a few words, and then I will come home and rest—rest—rest."

When time came in the service for the sermon, Mr. Raber moved the pulpit to one side and placed a chair on the front of the rostrum, in which Langstroth seated himself. After a few introductory words requesting the prayers of the congregation for himself and the service he said: "It is of the love of God that I wish to speak to you this morning—what it has been, what it is, what it means to us, and what we ought—" Here the doughty spirit of Lorenzo Lorraine Langstroth fled his broken body. He died as he had lived, a devout shepherd of his Master's flock.

We beekeepers who today place the testimonial to Langstroth in this church cannot remain in Greenfield to keep his memory green. We ask the people of Greenfield to come to our aid. If through the dedication of this tablet as a tribute to this great man, we can awaken in the minds and hearts of the folks of Greenfield a better appreciation of one of their former fellow citizens, our visit will be worth while. It is the hope of every beekeeper here present that our tribute may bring greater honor to his memory. We ask the people of Greenfield not to forget Lorenzo Lorraine Langstroth, a man worthy of high esteem, a good man who did much to make this community a better one, a man whose life was that of suffering but whose spirit was lofty, and a simple gracious man whose affection for mankind was ever manifest.

An apiary in Holland. Photo sent by A. J. deLoothe, Lange Geer 99, Rotterdam, Holland

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Honey in Oven Cookery

By Mrs. Benj. Nielsen

Serve this luscious honey oven-cooked meal and take a bow.—Photo courtesy Kellogg Company.

Dinner's in the oven and what a cozy sense of well-being the busy cook enjoys. No constant watching hers! Nippy days, advance warning of worse to come, make the steady even heat of the oven doubly welcome. And no anxious moments if some member of the family is late; oven cookery will safely wait; it need not be served on the dot.

Honey is especially adaptable to slow oven cookery. Because of its tendency to scorch easily, cooking temperatures should be low to preserve the delicate flavor of the honey. The long slow cooking periods of the recipes chosen for this month permit a real merging of this toothsome sweetening and flavoring agent with the rather bland main ingredient of each dish.

Then after the long slow cooking period is over, remove the baking dishes, increase the heat, and pop in a pan of honey muffins. Stir up a green salad and set the table while they cook, and be prepared to take a bow.

Honey Baked Beans

Two cups navy beans, ¼ pound fat salt pork, sliced, 1½ teaspoons salt, ¼ cup honey, 2 tablespoons brown sugar, ½ teaspoon mustard, 2 tablespoons catsup, and 1 small onion.

Wash beans; cover with 2 quarts of water and let stand overnight. Cook slowly until skins burst or until just tender. Drain. Place half of the beans in an earthenware bean pot or casserole. Bury part of pork in the beans and add half of combined remaining ingredients. Add rest of beans and seasonings. Place remaining salt pork on top. Now cover with boiling water. Cover and bake in slow oven, 300 degrees F., for 6 to 8 hours. When necessary, add water. Serves 6 to 8.

Honey Rice Pudding

One-half cup rice, 4 cups milk, ½ teaspoon salt, ⅓ cup honey, grated rind of ½ lemon, ¼ teaspoon nutmeg, and ½ cup raisins.

Wash rice and add milk, salt, and honey; pour into greased baking dish. Bake in slow oven, 300 degrees F., about an hour, stirring several times. Add lemon rind, nutmeg, and raisins; continue baking 2 to 2½ hours. Serves 6.

Honey Bran Muffins

Three tablespoons shortening, ½ cup honey, 1 egg, ⅓ cup buttermilk, 1 cup ready-to-eat bran, 1 cup sifted flour, 1 teaspoon baking powder, ½ teaspoon salt, and ¼ teaspoon soda.

Blend shortening and honey. Add egg and beat well. Add milk and ready-to-eat bran; let soak until most of moisture is taken up. Sift dry ingredients together; add to first mixture, stirring only until flour disappears. Fill greased muffin pans two-thirds full and bake in moderately hot oven, 400 degrees F., about 25 minutes. Yield: 8 large or 16 medium muffins.

Aurora, Nebraska.

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Consider the Sunflower

By Paul Hadley

Wild sunflower

The wild sunflower is one of our most valuable "weeds", as seen from the standpoint of the beekeeper. It is abundant; it is a prolific producer of pollen and nectar; and it begins to bloom in mid-summer, a season that is "betwist and between" when there is usually a shortage of most honey producing flowers. From then until well after the asters, goldenrods, and other fall flowers have bloomed, and often until frost the wild sunflower produces an abundance of bloom, well patronized by bees. Even the wild bumblebees find it attractive.

From the Atlantic Coast to the Great Plains, and from Canada to Mexico, wild sunflowers are found growing in large acreages. They grow vigorously along railroad dumps, by roadsides, in every vacant city lot. In fact, they seem to seek soils and locations in which no other weed will grow, and there they make a lush tall growth topped with their golden blooms. The writer has seen them camouflaging the coal mine dumps of the Middle West, and has seen them growing densely beside the tracks and along the river banks of eastern cities. In the South, there is a related sunflower that has slender delicate stems and daisy-like blooms, resembling the wild rosinweeds (a relative of the sunflowers) of the middlewestern states.

The sunflower, as is, is **not** a single blossom, as one may think, but a composite bloom consisting of several hundreds, or perhaps several thousands, of tiny separate florets, very small, but each a separate individual flower. Seen through a magnifying glass, each of these florets resembles a tiny golden star, each with five petals or rays, and complete with stamens and pistils. It is these florets that produce the pollen and nectar so valuable to the beekeeper. There are two kinds of the florets, the perfect stars which are packed closely together in the center, and those around the edge which are highly specialized; it is these edge flowers which form the great "petals" which make the flower so showy. One separate flower produces one petal, and it takes a great many of them to form the display of golden color.

In addition to being valuable as a honey producer, the sunflower is valuable in other ways. As a cultivated plant, it produces silage for livestock feeding; it produces seeds for chicken feed; it produces oil from its seeds that is valuable in cooking and shortening. In Russia, sunflower seeds are sold and eaten much as we eat peanuts; and in some large cities of this country, we will see sunflower seeds offered for sale in candy stores. Children like them, and they **do** have a nice nutty flavor.

The Indian cup plant, and the Jerusalem artichoke are also sunflowers, and the daisies, rosinweeds, Spanish needles, and many other wild plants are relatives of the sunflower family.

Philadelphia, Pa.

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These "stars" are the individual florets of the sunflower, enlarged many diameters. Each sunflower blossom is a composite bloom containing many hundreds of these small florets

Wild sunflower (Helianthus). This is not the species common in the middle west, but a smaller variety of the southern woods and waste places.

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Hernias and Backaches Avoided

By N. George Thompson, Sylvania, Ohio

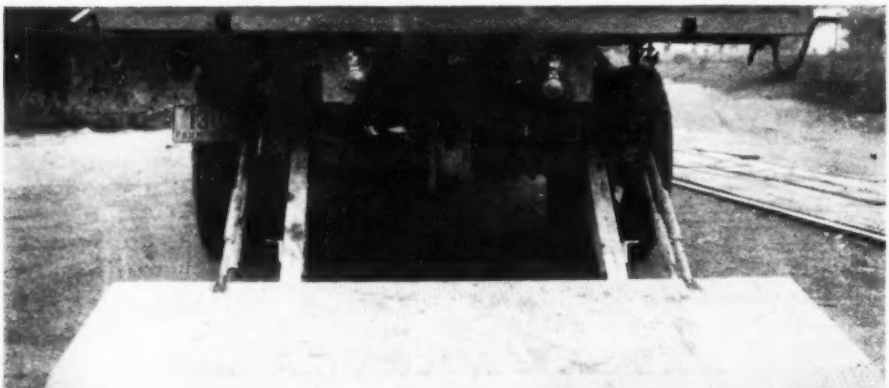
After you are past the age of 40 you begin thinking of gadgets and all sorts of labor-saving devices to prevent those well known backaches and hernias which are so popular among beekeepers.

I am running 700 colonies of bees. During and since the war I have found labor very scarce. My answer was a convenient tailgate hoist. After looking over several different types of hoists, I found that this particular hoist was best adapted to my type of work.

The hoist works in a vertical position to make a tailgate. It works under power. When in a horizontal position it gives 34 inches more on the back of your truck for loading, or it may be raised to any height wished, so that it may be used as a workbench while out in the yard. It will lift a full ton. While moving bees I place nine colonies on the lift and ride up with the load, then stack them in the truck. Just taking out the tailgate and climbing on and off the truck in the old way is enough to tire one out in a day, let alone lifting anything.

I used to need three men while loading bees for moving, now two of

Mr. George Thompson beside his 2½-ton Ford truck equipped with hoist.



The hoist lowered to the ground ready to be loaded

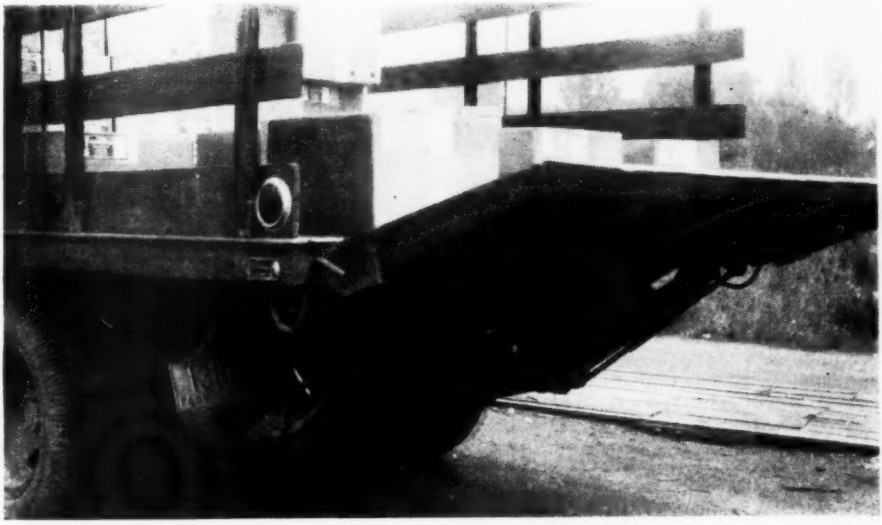
us do it in half the time with less work, and we're not half as tired.

If anyone is interested and is going through Sylvania, I shall be glad to demonstrate the operation of this hoist.

I think it is so good that in the past three months I have had it I feel that it has paid for itself many times; in fact, it is the greatest labor-saving device, and the coming thing for the beekeeping industry.

Right: The hoist lifted part way up with load including the operator.

Below: The hoist raised up ready to be folded up to make a tail gate for the truck.



Drying Cappings

By George D. Curtis, Ramona, Calif.

The average small beekeeper may find the following method simpler than Mr. Rea's for cleaning up a small amount of cappings: Take off the cover of a hive, put on a bee escape board with the bee escape removed, then a wood and wire queen excluder on top of that, and then an empty super. Dump the cappings in(after they have drained all that they will drain) and cover up tightly. This should be done at evening, as Mr. Rea says, to prevent robbing, and the cappings should be stirred at evening until the bees have carried all the honey down.

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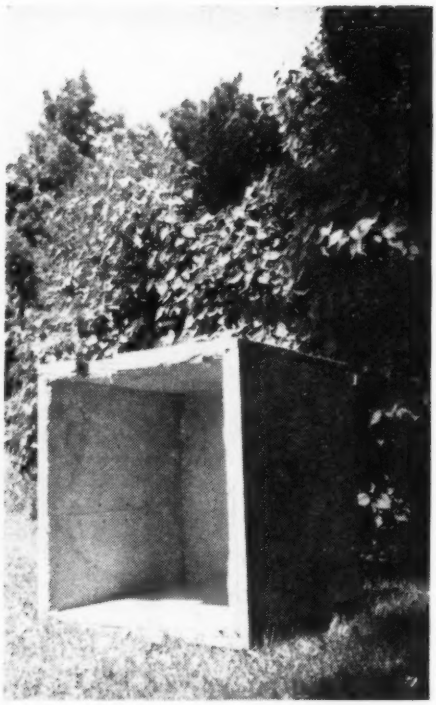
Wintering Bees Outdoors in Maine

By Ira Scott, Houlton, Maine

No. 1



No. 2

In wintering honey bees outdoors I have used the following method of packing with very good success. First, my hives are set on stands about 18 inches above ground. On this stand I place a sheet of Celotex insulating board at least three eighths inch thick and several inches larger than the hive floor board. On this I set the hive. Next I made a wooden case of plain three quarter inch boards about two inches bigger each way than the hive body and food chamber combined. This box is lined with heavy Celotex insulating board. A bottom entrance one half inch by four inches is cut in the bottom and one half inch top entrance is bored through the cover case and the hive body is about six inches from the top of the case. This provides a circulation of air and prevents condensation and mildew. Then boards slightly taller than the hive cover case are stood on end around the hive stand and nailed to it to form a three-sided windbreak. The south side is left open. Boards are laid across the top to form a roof and covered with tar paper.

This shelter has protected my bees in better than 30 degrees below zero weather here in northern Maine and has the additional advantage that once constructed it can be easily applied and removed. Such a cover case will last for years if properly cared for.

Our Cover Page

Here in the West you don't have to go far to view good scenes. This was taken from my own backyard at Elsinore, California — Clarence Tontz.

Pascal Leclercq, Beekeeper

By H. H. Root

Gleanings has enjoyed a visit with a French honey producer, Pascal Leclercq. Mr. Leclercq and his father have about 1500 colonies of bees in France. In order to renew the acquaintance with American beekeeping, the son is following in the footsteps of his father who visited this country 20 years ago. Mr. Pascal Leclercq reached the United States in March, and is spending some time in all of the principal queen rearing and honey producing sections of the country, studying the newer developments in the industry that have taken place in the last generation. Mr. Leclercq, familiar already with the main honey plants of the United States, says that they have many of them in France although their importance for honey differs somewhat. Sweet clover, for example, often growing by the roadside, does not yield as it does in the United States. Sainfoin clover is much more of a commercial honey plant in France than in the United States. For some reason this clover apparently does not stand a semi-arid soil, and therefore does not thrive as well here as in Europe.

Locust, a splendid yielder here, is limited, however, only to certain localities where there is enough of it to enable the bees to produce honey commercially. In many localities of France it is well distributed and so profuse a bloomer that it is of more importance relatively as a honey plant.

Pasqual Leclercq

Honey prices, reflecting those of many other commodities are correspondingly higher in France than in the United States. Sugar is not rationed as in England, but sells for a high price.

Gleanings wishes Mr. Leclercq an interesting and profitable year in the United States and increasing prosperity when he returns to his mother country.

Comment on 80 Years Among the Bees by E. R. Root

By J. T. Calvert, Secretary, The A. I. Root Company, Medina, Ohio

I came from Canada the first week of April, 1881 at the age of 18. My first work was among the bees. There had been a heavy loss of bees which were in double-walled so-called chaff hives. I believe there were about a dozen very weak colonies remaining alive. Mr. Root obtained from a beekeeper in Seville, nine miles south of Medina, 125 colonies of Italian bees on the Adair frames, 13⅜ x 11¼ inches. I transferred all of these into the Langstroth frames, 17⅝ x 9⅛ inches, cutting out the combs and putting them into the longer and shallower frames.

There were other bees obtained in box hives but this lot from Seville was the principal addition to the yard that first season of my experience in Medina. It was during those early years that I put up for shipment many packages of bees in one-half, one, and two-pound wirecloth cages, usually with a queen in each cage taken from the same hive as the bees and not requiring introduction on arrival as is the custom at present.

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Second Glances

By C. M. Isaacson

Adequate packing is essential, says Geo. Rea (page 545), and I believe that all will agree. The only disagreement will be how to supply it. Some contend that honey and pollen make the best packing — along with sufficient bees, of course —and experience up in northern Minnesota has strengthened this belief in my case. Yes, I do believe in some actual packing around the hive; we use three to four inches on three sides (none in front—the south or east side), six to seven inches on top, and a top or middle entrance. Also we leave the escape hole in the inner cover open. Mr. Rea's method brings results under seemingly just as severe conditions as here though, which all goes to show that good beekeeping is the same everywhere —only the details are different. The variation in applying the straw—asphalt paper packing (which, by the way, is cheap and quickly applied) is just that — details. Making a rounded center on top and bulging the corners to prevent tearing the paper are points to remember for beekeepers packing this way. But above all, pack **good** colonies.

Don't expect immediate results from the Federation's initial test of honey advertising, says Geo. C. Nagel (page 548). Of course he is correct; the American Honey Institute has shown substantial results with little to spend but only through wise planning and consistent application of their campaign. But the advertising is worth while—as we can know best when we **don't** do it.

"Few are great." These three words by Dr. Phillips are a fitting memorial in themselves to the man we know of as L. L. Langstroth. He was good—and that influence never is over; he was great, and the inventions resulting from that greatness have been and will be felt in beekeeping over a long period of time. Truly, no man dies (page 550).

Salvaging a house or tree colony does give a beekeeper a certain thrill. As Dr. Stuive says, they'll work for you then. But, even at the risk of disillusioning someone, I rather think that your swarm would have settled again, pan beating or not, Doctor. I have **tried** to dislodge at times and have often found them unbelievably stubborn as long as **they** had not decided to leave. Yes, I know—some would say "just like a ——— ———. (Page 556.)

Automatic swarm hiving really should fit in with your let-alone beekeeping system, Propolis Pete. But seriously, I think we all join the Editor in being sorry that the pressure of work will keep you from your bees—and your monthly comments from us. Best wishes and a safe return! (page 559).

Sulfa enthusiasts are enthusiasts —to speak mildly (page 560). I was sure that Dr. Phillips' statement would bring forth vigorous comment. As I said before, I believe the sulfa treatment to be more than a fad—rather, that it has definite value. But, Dr. Haseman, there have been cases of outright failure with sulfa—and beekeepers who have relied too heavily upon it have found disease almost out of control before they could realize what was happening. Let's tell beekeepers to use it —but carefully.

Late supersedure queens do make for good colonies the next season (page 565). In normal apiary practice here quite a number of colonies supersede the last part of the honey flow and this is just what we like to see—the brood nest grows rapidly the following spring. Yes, the real test is the amount of honey produced.

Nailed to the ground (page 571). Yes, that is a good rule to follow when checking bees for winter stores. A normal colony with such a weight will stand nearly any weather extreme. Your method of packing is not so important then.

To make that good colony the average is the dream of all beekeepers. We all have noticed how some hives seem to pile up the crop far beyond expectations, and it may well be that the something called morale has something to do with it. Without it—as in the case of a colony prevented from swarming **but not satisfied**—we can be equally surprised at the little accomplished. But of course on the whole it is bees (big colonies) that get the crop.

Thief River Falls, Minn.

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A Talk to Beekeepers

By M. J. Deyell

Writing the Talks to Beekeepers

Winter Around the Corner

How time flies! It seems but a short time ago that fruit trees and dandelions were in bloom. At present, in this vicinity, the goldenrod which was in its prime a week or so ago is now fading and white aster is appearing here and there. The nights are getting cool, bees have a tendency to stock the brood chamber with honey rather than put it up in the supers. They are somewhat listless at times as though they realize that winter is coming and their labors are about to end for the season so far as gathering honey and pollen are concerned.

Most of us are rather local in our thinking. Here in the North we are talking about winter. People in the southern hemisphere are looking forward to spring.

As I mentioned in a recent talk, if a colony were suddenly transported from this latitude to the southern hemisphere the bees would of course adapt themselves to the new situation just as we would do if we accompanied the bees. Bees as well as humans have the adaptability trait.

Here in the United States bees have been transplanted from the North during late October to a southern state where a late honey flow was still on. Of course, the bees started carrying in honey and pollen, even though in the North they had practically reached their period of quiescence.

I was told by a southern beekeeper two years ago during the Tampa meeting that bees moved from North to South late in the fall showed greater activity during the winter and early spring months than those not moved but kept in the South throughout the year.

The Last Roundup

In most regions of the North it is possible to give colonies a check for stores and the condition of queens early in October, although this work should be done earlier. If a populous colony is found to be queenless and there is a high percentage of young bees in the hive it would pay to introduce a young queen if one is available.

If the colony is below normal strength it should be united with a queenright colony. The newspaper method is recommended which means that a single sheet of newspaper is placed under the queenless hive of bees set on top of a colony having a queen. A few small pencil holes can be made to permit air to circulate through the upper hive. In a short time the bees will gnaw away the paper and unite gradually.

It has been our experience that colonies of bees can be united late in the fall without using a newspaper and without having the bees fight each other. Simply set the queenless hive of bees on top of the colony having a queen with as little disturbance as possible and permit the bees to unite. In any event, colonies should be very populous in bees for best results in wintering.

Ample Stores Necessary

It has been said that more bees die during the winter as a result of starvation than from any other cause.

Many beekeepers are now using the food chamber hive which means wintering in a two-story hive, the upper story (preferably a deep or standard super) being filled with honey, in addition to some honey in the lower chamber. Some beekeepers are now wintering in three-story hives which gives a superabundance of stores. Three-story colonies can usually be divided quite early in the spring at the beginning of the fruit bloom honey flow, giving the new divisions young laying queens. This procedure can be used by those who thoroughly understand the

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technic to be followed. Beginner beekeepers should watch their step on dividing.

To get back to the food chamber and its importance: A two-story hive will contain an ample amount of honey and pollen for winter and early spring stores provided the food chamber is well filled.

A populous colony of bees in a two-story hive will usually form a winter cluster, with the upper part covering the lower portion of the middle combs of honey and the lower part of the cluster occupying the center empty combs in the lower chamber. In most instances there will be honey in some of the combs at the sides of the lower chamber. This means that the cluster is virtually surrounded with honey. As this honey is slowly consumed during the winter, the cluster moves upward. It should be said that the cluster usually forms near or above the front or entrance of the hive, works upward, and then backward during the winter. If there is an abundance of honey above the cluster the bees are not likely to starve during the winter. Furthermore, in a double-story hive the cluster, if it occurs with its approximate center between the two sets of combs, can move sidewise, if necessary, to fresh stores.

The heavy loss in some northern regions during the winter of 1947-1948 was mainly due to long confinement of bees in the hives during protracted cold spells of winter. There seems to be a limit to the length of time bees can remain in a cluster and at the same time obtain enough food to satisfy their requirements. However, very populous colonies of bees with an ample amount of stores are likely to survive the rigors of a severe winter, whereas colonies that are subnormal in strength may pass out during a severe winter.

Today we had a letter from a beekeeper in a southern state who says that he prefers wintering each colony in a single-story hive. Of course this can be done, even in the North and, as a matter of fact, it was done years ago before the food chamber hive was used. A single-story ten-frame or Jumbo hive, if well provided with stores, will contain enough for the colony to winter on, as well as enough comb space for the colony to cluster. A colony in a single-story hive usually needs to be fed in the spring before nectar from natural sources is available in quantity.

A two-story hive boiling over with bees ready for winter. Note the flight hole in front in the middle of upper story or food chamber.

Wintering Colonies in Shallow Extracting Supers

Another beekeeper commented on what our Mr. E. R. Root said in his department last month about wintering in shallow supers. This can be done. I have had a few colonies wintering, each in three shallow supers, for a number of winters. They winter well.

There appears to be one advantage in wintering a populous colony of bees in either three or four shallow supers, namely, that the bees can move laterally or sidewise between the sets of frames if necessary. In some cases a colony in a single-story ten-frame or Jumbo hive, clustering on the combs in the center of the hive may consume practically all of the honey on these combs. During a long cold spell the cluster cannot move sidewise onto fresh combs of honey because the temperature in the hive may be too cold for the bees to go over the top bars, down under the bottom bars, or around the end bars to move sidewise. In the old days when some used single-story deep hives for wintering, beekeepers used to punch a hole through the center of the

combs late in the fall to permit the cluster to move sidewise during the winter, if necessary, to find fresh stores. Wintering in two or three story hives, as already mentioned, gives a cluster, if sufficiently large, a chance to move sidewise easily.

Bees in the South also need plenty of stores. Some beekeepers in the North think that bees in the South get enough nectar during the winter, especially in the late winter months, to meet their needs. In some parts of the far South this may be true. However, most regions of the South have comparatively cool weather during most of the winter months—too cool for the bees to fly freely. They may and usually do get some pollen after the first of the year. A great deal depends on the nature of the season. In any event it is important that southern beekeepers provide an ample amount of stores for each colony and it would appear to be an advantage to use the food chamber hive to help insure an abundance of stores.

Protection Seems Essential

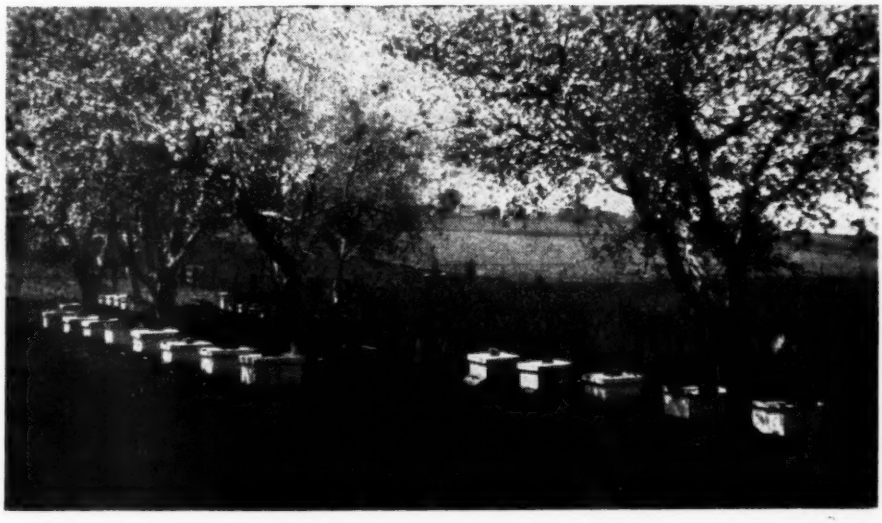
It appears to be a distinct advantage to have ample wind protection for hives of bees in the North. A snow fence placed at the North and West of the apiary will break the force of the wind.

Bees wintered out of doors in the North, especially in the far North, seem to winter better with some additional protection. Many beekeepers use tough building paper with chaff, coarse shavings, or some such material between the paper and the hive. Some also provide an upper entrance through the packing which appears to have some distinct advantages. Bees can get out of the hive quite easily through an upper entrance, usually made in the center of the front of the food chamber, whereas if they were forced to go down through the bottom of the hive which would likely be cold, they might not be able to get out to take advantage of a winter flight.

Furthermore, an upper entrance or flight hole is not likely to get plugged up with ice or dead bees during the winter. In some instances where a relatively small bottom entrance is used and no upper entrance, this bottom entrance may become plugged with dead bees or ice which may cause the death of the colony during winter.

Our apiaries around Medina are wintered in single-walled hives with no packing. We see to it that each colony has an abundance of stores, a relatively small bottom entrance approximately four inches by three eighths of an inch, and an upper entrance consisting of a three quarter-inch auger hole bored through the middle of the front of the food chamber just above the hand hold.

(Continued on page 661)



A small backlot apiary in single-story hives
—Photo by B. Hadenfeldt, Davenport, Iowa.

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Asked and Answered

What to Do with Combs on Which Bees Died During Winter

Question:—This past winter I lost five colonies of bees out of six. All were in double-walled hives and well supplied with honey but this did not save them. The honey is granulated and badly discolored and I suppose a total loss save for the wax. I have no means of rendering the wax. What should I do?—Mrs. J. D. McKelvie, Ohio.

Answer:—It is possible to put a package of bees with queen in your hives after you brush the dead bees from the combs and the bottom boards of the hives. We assume there is no AFB in your apiary. The package bees will soon clean up the combs and will utilize the honey in the combs. If you wish to save the honey and wax and do not care to order bees, it is possible to cut the combs of honey out of the frames into a suitable metal container or containers, then place the containers in a larger vessel such as a wash boiler which is partly filled with water. The wash boiler should be placed over a gas plate and the water heated in order to melt the combs of honey in the metal container. In other words the container of combs is placed in a hot water bath. In a short time the honey and wax will melt and after it is thoroughly melted it should be allowed to cool. The wax being lighter than honey will rise to the surface of the honey and solidify. The wax may be lifted off the top and the honey may be strained through fine cheesecloth in order to make it suitable for table use. All of this may sound rather complicated, but in reality it is quite easily done. We hope, however, that it may be possible for you to get some packages of bees for at least some of the hives. It would be unnecessary for you to do any feeding of sugar syrup because there is honey in the hives for the packages of bees.

Rehabilitating a Hive Containing a Dead Colony

Question:—Several days ago I looked into a hive and found the whole colony had apparently starved. What surprised me was the fact that all the bees looked like they were newly hatched—that is, all wings and plumage was bright and sharp. There were no cells of brood or stores, and hundreds of bees had apparently crawled into the cells and died there. I have ordered a new package of bees and am wondering what salvaging I can do on the good brood comb that has been built up. And is there any simple way to extract the hundreds of bees that are in the cells? Two combs show some areas of slight mold on the upper edges of the cells. —J. F. Holman, Maryland.

Answer:—It seems probable that the bees may have been short on stores. This happens occasionally, even in well managed apiaries. Some colonies may consume more food than others during the winter. If each colony is wintered in a two-story hive the upper chamber, being well filled with honey in the fall, in addition to some honey in the lower chamber, such a colony is not likely to starve. Regarding the dead bees that have their heads in the cells of the combs, it is sometimes possible to jar some of these bees out of the cells after they become dry. In any event, the bees in the package will remove the dead bees if given a little time. It is an advantage to spread the combs containing dead bees, or separate them by inserting drawn combs that are free from dead bees in order to give the bees in the package a better chance to clean out the combs. Even though some of the combs are slightly molded, the bees will clean them out in due time.

How to Handle Fermented Honey

Question:—I have just extracted a quantity of honey for a neighbor. I found the honey in quite a few combs fermented although they were fully sealed. The weather has been hot and dry. The honey flow was very good and the combs very heavy. I have never had such honey before and am at a loss to know the cause. Can you give us any help?—Fred H. Harvey, Michigan.

Answer:—It was quite unusual to have honey ferment when the weather was hot and dry. Such fermentation sometimes occurs during a protracted spell of wet weather which prevents the bees from curing or ripening the honey properly. The excess moisture in the nectar cannot be driven off normally by the bees during wet weather. Honey that is thin and inclined to ferment should be heated to a temperature of 160 degrees F. and kept at that temperature for about 20 minutes, and then cooled. In order to heat the honey the cans of honey are placed in a boiler of hot water

over a gas plate. It is advisable to set the cans on sticks of wood so that the bottoms of the cans do not come in direct contact with the bottom of the boiler holding the water. The honey should be stirred as it is being heated. A mercurial thermometer is necessary for measuring the temperature of the honey as it is heated. This heating of the honey drives off the excess moisture and destroys any yeasts that may cause fermentation.

Can Find No Brood or Queens

Question:—Early this fall I took four July swarms to a buckwheat field to see if I could build them up for winter. Just brought them back and three were in nice shape, strong in bees and both chambers nearly full of honey. However, on examining them I could find no brood or eggs in any hive. I didn't see a queen, but I seldom can when the combs are so crowded with bees. Do some queens stop laying entirely at this time of year? Should I try requeening this late?—Samuel W. Taff, Wisconsin.

Answer:—You are not likely to find any brood in combs of your colonies at this season of the year (October 10). Bees in that region are entering what is called a period of quiescence, when no brood is found. Queens will start laying along in February, increasing in their egg laying as spring approaches. Queens are rather small at this season of the year and they are not easily seen. It seems likely that your colonies have queens and we suggest that you disturb the bees as little as possible.

The Use of Queen and Drone Trap

Question:—Is it advisable to use a trap on the front of each hive all the season?—Mrs. R. A. Dykes, Ohio.

Answer:—It would seem inadvisable to use a queen and drone trap over the hive entrance at this season of the year (April 15). This appliance has a use at certain seasons of the year when swarming is prevalent. For example, if the owner of the bees is obliged to be absent from the apiary during the middle of the day when swarms usually come out, a queen and drone trap may be placed over the entrance of the hive from which a swarm is expected. The owner can tell by examining the entrance of the hive and trap whether or not the swarm has issued in his absence. If the swarm has come out, the queen will be found in the small compartment directly above the hive entrance. The swarm, not being able to leave the hive because of the queen's being confined, will return to the hive. It is customary to manipulate the combs of the hive and destroy queen cells, raise some of the combs of brood out of the brood chamber below into a super above to relieve congestion, then release the queen into the hive. The queen trap impedes the progress of the bees as they leave and enter the hives, and as already stated, it is unnecessary to use this plan regularly. To control swarming, supers should be placed on your hives in ample time before congestion occurs within the brood chamber. When one or more supers are given, the bees are likely to move up into the supers enough to relieve the congestion below.

Painting Hives on the Outside

Question:—Can you paint the exterior of bee hives any time throughout the summer season while bees are working or otherwise, without any harm? I have had many ask this question. We have hives which need good coats of white paint now. —Paul G. Kirk, Sr., Ind.

Answer:—It is perfectly possible to paint hives while bees are in them. You can leave the front of the hive or the portion near the entrance until late in the evening when the bees are at home. Some use a spray gun to apply paint to hives.

"It's no use, Wilbur . . . They won't come out by coaxing."

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Editorials

National Honey Week The last week in October has been designated by our American Honey Institute as National Honey Week. This furnishes beekeepers and handlers of honey an opportunity to focus special attention on our product.

There are a number of different ways in which this can be done. Beekeepers who have a considerable amount of honey to sell and wish to dispose of it through local channels can place advertisements in local newspapers calling attention to the virtues of honey and where it may be purchased. A neat honey sign in front of the building where honey is to be sold seems essential. Live bee window displays in grocers' windows where honey is sold invariably cause people to stop and investigate. And last but not least the use of honey recipe folders, counter cards, and other printed matter put out by the American Honey Institute, Madison, Wisconsin, at a very nominal cost, can be used to advantage in promoting honey sales. Let's make National Honey Week a honey of a week.

Goldenrod One of the most widely distributed plants on this continent is goldenrod, of which there are said to be about 80 different species found in most of our states and Canada. It starts to bloom in late July and August in some sections and continues in other regions until late September. When unmixed with other honeys the color is a rich gold and the flavor pleasing.

In some instances a good crop of goldenrod honey is secured following a scant crop from summer sources. It is, in fact, a life saver for many beekeepers, especially in some of the eastern states where clovers are not a reliable source of nectar.

Goldenrod furnishes an abundance of pollen at a time when it is needed for fall brood rearing in developing populous colonies to go into winter.

A strong odor is usually noticeable around hives in the evening during the goldenrod flow. Many beekeepers, usually beginners, become alarmed over this rank odor and imagine their bees are polluted with foulbrood. We assure them that they have no cause for undue worry.

While some farmers may regard goldenrod as a noxious weed, beekeepers living in regions where it yields nectar regard it as their faithful friend.

Don't Get Panicky Over the Honey Situation We have just received a letter from a Minnesota honey producer asking us to write an editorial urging beekeepers not to become panicky and sell honey at prices lower than the cost of production, which is said to be around 14c. This beekeeper says he has most of his 1947 crop and all of his 1948 crop, and that one beekeeper in his community is selling 5-pound pails to the grocer for 60c, while his price is 80c.

Thomas S. Davis, Sec.-Treas. of the California State Beekeepers' Association, in his September letter to beekeepers just received (Sept. 20) says in part:

"It has been said that honey is in a depression in the midst of inflation. At least the price of honey is too low in relation to the price of labor, equipment, and living essentials. Better organization among beekeepers is one remedy. If every beekeeper in California belonged to this Association we could pay for radio advertising and newspaper space. If every beekeeper supported the American Honey Institute to the extent of 1 percent of his gross production, the Institute would have sufficient funds with which to do radio advertising and to make more contacts for the sale of honey. If every beekeeper belonged to the National Beekeepers' Federation, Mr. Glenn Jones, the Secretary, could carry on to better advantage for the improvement of the beekeeping industry. And if honey buyers and packers would support these same organizations to the extent of 1 percent of their gross sales there would be ample funds for national advertising of honey. Let's get off the dime and do something to support the price of honey before it goes any lower. Honey shouldn't sell lower than it is now even during a depression".

Mr. Davis has hit the nail square-

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ly on the head. Beekeepers are somewhat to blame for the recent downward trend of honey prices. Don't, please don't yield to the impulse to sell at sacrifice prices. There really isn't an over-production of honey but rather an under-consumption. The national honey crop for 1948 is likely to be lower than last year, according to recent estimates. In the event that the demand for honey should strengthen, which is possible, the market might be bare of honey before the 1949 crop is harvested. That would be a serious situation for our industry.

It is well to bear in mind the fact that lowering the price of any commodity does not necessarily increase the volume of sales. It is persistent and consistent advertising coupled with quality and service that creates and maintains a demand for all commodities, and this includes honey.

Low Priced Crops and High Priced Automobiles When rationing of sugar was discontinued and sugar prices steadily declined, it was a foregone conclusion that black market prices for honey would disappear. Housewives, almost delirious over their new-found freedom, bought sugar that they did not need and, while they still had it on hand, its declining price too often put honey out of their minds altogether. But, in face of crop failures in many parts of the country, there is a possibility that fine table honey may become very scarce even while the price remains not far from the former ceiling.

This is a time when constructive advertising of honey should be done. It is also the time of all times when the good work of the American Honey Institute should be encouraged and helped. Honey is a better sweet than sugar and that fact should be kept before the millions of women who are the final buyers for the home.

This is a time when all avenues for selling should be encouraged—from the cooperatives and independent canners and bottlers down to the producer type of selling.

This is a time when many conditions are out of balance. Honey is not alone; many other agricultural products are selling at low prices. Most meats are still selling at unheard of high prices, while in some parts of the country cabbages are being given away to those who will come and pick them. Used cars are still selling at prices beyond reason, considering the 40,000 or 50,000 miles that they have been driven, and yet wonderful crops of luscious tomatoes are being plowed under before the crop is harvested because the price that can be obtained will not pay for the picking. While millions may be starving next winter, sweet corn begs for buyers at 25c a dozen or less. Fruit growers have had to dump peaches on the ground. Boys and girls are passing up chances to go to college, investing their quickly acquired earnings in automobiles, thereby helping fill up the cemeteries and hospitals.

The artificial prosperity and out-of-balance conditions are part of the aftermath of a terrible war. It is hard for a producer to buy a $2000 automobile considering the price he can get for his honey.

Honey Production in Canada From a sheet just received from the Dominion Bureau of Statistics, Agricultural Division, Ottawa, Canada, we learn that the Canadian honey crop for 1948 is estimated at 41,853,000 pounds, or 13 percent more than was produced last season. The estimated number of colonies of bees in Canada is 561,000. This makes an average per-colony production of 74.5 pounds. A ten-year average (1940-1948) was slightly over 71 pounds. The highest producing province this season is Alberta with 113 pounds per colony.

Comparisons are said to be odious. However, available statistics show the average per-colony production of honey during the last ten years in the U.S.A. to be around 40 pounds.

Does this mean that the Canadians are better beekeepers than U. S. beekeepers? We would hardly care to make such an admission. There are good and poor beekeepers in both countries but we will admit that a large percentage of commercial beekeepers in Canada certainly do know their bees.

We Americans like to believe that bees in northern latitudes store large crops of honey because of favorable soil and climatic conditions and the longer days of summer in the North.

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As brought out by E. Braun of the Dominion Experimental Farm at Brandon, Manitoba, in his article "The Honey Flow and Weather Data" on pages 198-201 of May, 1945, Gleanings, "On clear days in early summer the extreme northern states receive about two hours more sunshine than that received in the Florida peninsula and extreme southern Texas."

The northern tier of states in the Northwest as well as Canada have an intensive growing season for vegetation and this naturally results in an intensive bee season and high production yields of honey.

The Color Sense of Bees That bees can detect colors as well as odors is now pretty well established. When hives are placed in straight rows and entrances are pointed in the same direction, the incoming bees often get confused and go into the wrong entrances. This can be corrected by painting the hive fronts different colors. Now for the proof: If a hive with a red front is exchanged with one having a blue front the bees belonging to the blue will go to the blue, and the bees belonging to the red will go to the red, notwithstanding that the position of the two hives has been reversed.

In the same way, Dr. Karl von Frisch of Germany placed on a table variously colored cards. He placed a small dish of syrup on the blue card. After the bees got nicely started on the syrup he rearranged the cards, but this time he placed an empty dish on the blue card remote from the position it formerly occupied. First of all the bees located the blue card and then clustered on the empty dish, but reluctantly departed. The experiment was repeated with the same result.

In the Bee World for April 1935, page 40, P. Koch reports that bees seem to favor dark colors. He noticed that there was a drifting of his bees toward the hives with dark fronts. This meant that the colonies with the darkest fronts had the most honey. Dark blue came first and then in order—black, brown, white, and pale green.

Nature has endowed some nectarless flowers with bright colors, the evident purpose being to attract insects.

When sweetness and color are both present in the same blossom, that species must require the visitation of bees or insects. We have a fine example of this in the apple trees. Here we have nectar, color, and odor.

Comb Honey Not Manufactured In the early 80's the statement was made that comb honey could be manufactured —"combs made out of paraffin, filled with glucose, and capped over with appropriate machinery". This canard went like wildfire over the country, and even to this day there are some who believe that honey in sections is manufactured because it is unlike the honey they saw on the old farm. Except in a very small way it is impossible to make honey comb as perfect and delicate as the bees do.

On a commercial basis it is an utter impossibility. Dies could be made that would press wax in a semi-melted condition in the shape of a honeycomb. So far, so good. But it would be impossible to make any dies that will free themselves from the comb after it is pressed into shape without tearing the comb to pieces. Any mechanic or diemaker knows that the idea is utterly impossible. Even if it were possible to construct the combs, it would be impossible to fill them with glucose and equally impossible to spread a film of wax over the filled cells that would come anywhere near imitating the appearance of comb produced by the bees.

Any consumer who has a suspicion that combs in sections are manufactured has only to look over a dozen or more sections at any grocery. He will find no two of them alike. If combs were built from dies they would all look alike, as do the common rough-faced cement blocks which are made in one mold. But a comparison of any two boxes of comb honey will show that bees make each section different from all others.

In the early 80's A. I. Root offered one thousand dollars for proof showing that manufactured comb honey had ever been or ever was on the market, the product so perfect that it could not be detected from the genuine. Needless to say no proof was forthcoming.

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From North, East, West and South

SOUTHERN CALIFORNIA, Sept. 3

Weather: We had normal weather during August. A few very heavy thunder showers occurred in a comparatively small area. These areas will benefit some if there happen to be apiaries in those districts. Three to four inches in as many hours will wet things. We had very few hot days, usually in the low 90's with an occasional day recording 100 degrees.

Market: Buyers come around and feelers are put out as to price with occasionally an offer. It seems to be a case of how low will the beekeeper sell for rather than how much will the buyers pay. We do not remember a situation just like it. There is so little honey in the hands of the beekeeper that it does not make a great deal of difference.

Honey Crop: It ranges from a few pounds to 60 pounds per colony.

Miscellaneous: "The bees aren't buzzing like they were last year in California". The Bureau of Entomology reports that there just aren't as many bees in the state. This report is probably right in the aggregate. A honey production survey July 1st showed the number of colonies of bees at the start of 1948 California season was six percent below a year earlier. The estimate of 442,000 colonies is the smallest inventory since the wartime increase began. Producers might be divided into two classes: those who have made little or no honey and those who have made a fair crop.

The making of increase has had some radical changes in methods of procedure during the last 50 years. Before that time practically all of the increase came about by the swarming instinct. Comb honey producers would sit around day after day, watching for swarms. As the industry gradually changed from comb to extracted honey, it was an easy matter to use short-cut methods in making increase. Now you seldom see an apiary run for comb honey.

"Slow demand for honey is reported to have dropped honey prices so low that many beekeepers were not getting enough returns to remain in full production." We hardly know how this is arrived at. We figured that we could produce honey at a lower cost per pound when operating 1000 colonies than we could when operating 100 colonies.

With the exception of Imperial and Palo Verde Valleys the bees that were moved to the orange and later to the cotton, alfalfa, and thistle up North are the bees that are making the honey for southern California this year. The only thing that will change this procedure is for southern California to get a good rainfall of from 20 to 25 inches. This would put the back country beekeeper back on his feet and is the only thing that will.

Say, do we miss the picture of Byer and the fine articles he has contributed to North, East, West and South! I am sure that I speak for all of Gleanings readers when I say, "We hope for his speedy recovery." We are again writing from San Luis Obispo but hope to be home in time to send Southern California notes for November Gleanings.—L. L. Andrews, Corona, Calif.

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NORTHERN CALIFORNIA, Sept. 3

Weather: There was no rain of any consequence in the honey-producing areas of northern California. Although some rain fell in the extreme northern part of the state, just enough to splash dirt on the fronts of hives but not enough to do any good in extending the blooming period of honey or nectar plants. Several days of comfortably cool weather, and cool nights, reduced nectar production and shortened the hours of flight. During the latter part of August warm weather prevailed and nectar production increased, especially from yellow star thistle, seed alfalfa, and lima bean.

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Plant Conditions: As intimated in this column last month, the flow from yellow star thistle will be shorter than first estimates indicated. The weather has been too cool for good nectar secretion and many fields dried up earlier than usual. The shortage of moisture in the soil, or weed control last year, reduced the acreage of thistle over that available a few years ago. Tarweed and blue curl are not abundant and are not yielding where they are present. Oak honeydew, frequently a dependable source for winter stores, is just beginning to yield in some places but is absent in many others. No reports have been received concerning incense cedar. New growth on toyon and manzanita is excellent. Both plants yielded well this spring and early summer in favored places.

Anticipated Honey Crop: Part of the honey crop, in fact most of it, is now in the can and indications are that it will be less than an average production for the entire state. The last of the star thistle and alfalfa crops are being extracted in the Sacramento and northern locations. The quality of both star thistle and alfalfa honey is excellent, both being lighter than usual and generally of heavy body when the combs were mostly sealed before being removed from the hives. In one alfalfa location where colonies had to be stripped of extra weight preparatory to an emergency move and where the combs are less than half sealed, the refractometric reading indicated a moisture content of but 17.6. Low humidity in the producing areas makes this possible.

Condition of Colonies: Where bees have had access to a slow flow of nectar from alfalfa or star thistle, the strength of colonies is generally satisfactory. Many queen and package bee producers who carry four-frame nuclei during the entire year have had to remove bees, brood, and honey on one or two occasions and yet have their nuclei in good shape for winter. Increase made from these nucs near the middle of May are now in their second or third story, depending on the location. As a general rule only such increase as is necessary to maintain the desired number of colonies is being made.

Movement of Honey: Considerable honey has already been sold over a wide range in price, the better grades selling at between 8 and 11 cents, some higher. The parity price for honey is around 17 cents to the producer. The sale of honey in farmers' markets and in retail stores has picked up, especially where the producer pushes his sales. The brisk movement of honey during the war years has made any movement now seem slow and unsatisfactory. There is no general tendency to hold honey although some producers habitually hold their honey until after the fall retail sales pick up and the distress lots of honey have been sold. The 1947 crop is fairly well cleaned up. Because of the fluctuation in honey prices, grocers are not prone to carry a large stock of honey.

Comb honey occupies a very favorable position with little available. **More beekeepers should go back into comb honey production next year.**

Miscellaneous: The California State Fair is now on and the honey exhibits attract much attention by their diversity. Opportunity for honey displays is being offered at all state fairs and a majority of the county fairs all over the nation. While there were more applications for displays than space permitted at our state fair, still more beekeepers should take interest in this form of advertising. The California fairs pay good premiums, more than enough to defray the expenses of making an exhibit. This year the color of the Gold Rush Days was the theme of nearly all of the exhibits and honey as "Liquid Gold" played a prominent part. Too little information was included to indicate the relationship of beekeeping to agriculture and to the development of our agriculture through the production of a majority of our food crops.—J. E. Eckert, University of California, Davis, Calif.

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BRITISH COLUMBIA, August 30

Weather: Beekeeping in this province has been under a cloud during August, or perhaps it would be more correct to say under many clouds and those of high moisture content.

In almost all sections the August rainfall has broken long standing records. In this Interior Dry Belt 3.82 inches have fallen to date against a 32-year average of .78 inches for the same period.

This means that hives have not gained in weight since the end of July which has dampened considerably prospects for a large honey crop this year. Prince George district in particular reports an almost total failure.

Most hot weather crops such as tomatoes, cantelopes, soft fruits, and hay and grain crops have already suffered heavily and conditions will be serious unless heat comes soon. And at the moment of writing we are hearing via our radio that our eastern friends are suffering from an intense heat wave. Too bad these things cannot be passed around a little more evenly.

Starting with early spring this province has suffered a great deal from excess moisture, heavy snows in March, and a quick run-off in May causing flood conditions that cut main highways and railways which were out of business for weeks.

Fortunately we have heard of very few serious losses by beekeepers but many suffered considerable inconvenience. The outstanding example of this was the situation in which our worthy Association President, W. C. Feedham, found himself. Mr. Feedham lives and works in Vancouver but commutes regularly each weekend to Ashcroft where he is establishing a new home and apiary business. The distance ordinarily is 250 miles each way but owing to flood conditions it was necessary to detour considerably so that the total round trip distance was 875 miles. Nothing daunted, our friend made the trip only to find, on arrival at Ashcroft, that while he could reach his house, the highway bridge by which he reached his apiaries across the river had been washed away and there was no other way around.

Honey Crop: Official estimates are for a crop of two million pounds and we have little doubt of this finding a ready sale from early indications.

Prices: Prices will not be as high as the post-war peak but will probably run from 25c to 35c per pound according to the class of trade.

B. C. beekeepers during the period following removal of price restrictions voluntarily held prices at a fair level to consumer and local buyers are now showing their appreciation of this attitude.

Miscellaneous: Our Provincial Apiarist, Mr. W. H. Turnbull, has earned commendation for a new departure from his office in the shape of publication of a seasonal bulletin known as "Bee Wise", mimeographed copies of which are mailed to each registered beekeeper. Mr. Turnbull has had extensive practical experience in beekeeping and these periodic bulletins have been of great help to beginners.—G. F. Pearcey, Kelowna, B. C.

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IOWA, Sept. 2

No doubt it is the expectation of unusual conditions which makes each season of honey production a problem within itself as well as a continued surprise to the beekeeper. Each season the combination seems to be enough different so that the lessons learned from the previous season are of little value.

The spring of 1948 started off with everything in favor of the beekeeper. Even the spring flow came on early and the summer flow followed without interruption. The summer flow lasted only about half the normal period and then it was necessary for the bees to loaf until early fall. At times some areas experienced a good flow from Hubam clover. However, the crop this season is a great disappointment to operators.

The question which is now confronting the beekeepers in this state is "How extensively can I afford to operate in 1949?" This, of course, is answered immediately by "How many colonies can I prepare properly to go into winter?" Generally speaking, the queens have gone through the season in good condition, but the stores were exceedingly short at the end of the season. The question is whether to reduce the number of colonies to go into winter and have some surplus honey or try to maintain the normal number of colonies and thus use up what might be surplus honey. Of course, the market situation is such that the answer to this question is all the more difficult. If it were

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possible to move honey, there is no doubt but that many operators would reduce the number of their units to go into the winter and sell the honey.

The pollination program has been put back several years because of a combination of circumstances this year. Many farmers became interested in the use of bees to increase their legume seed set. However, growing conditions were not entirely favorable for seed production. Added to this was an unexpected scourge of grasshoppers over a portion of the state, especially in the southwest third. Grasshoppers not only reduced the foliage and bloom, but the poisoning which was applied to kill the grasshoppers ended any opportunity for the use of bees. It is said that we are now entering another build-up period in grasshopper population. If that is true, 1949 may again see the primary objective—to kill grasshoppers. Seed production must of necessity become a secondary project. There may be areas in the state where these conditions will not prevail. It is up to the people in those areas — those who are producing and those who have bees which can be used to increase the production of seed should get together.

The beekeeper does not always realize the place or the role of the bee in agricultural production. Furthermore, those who are interested in agricultural production seldom take the services of the bees into consideration. The big worry now is agricultural surpluses, especially the grain crops. This is directing the attention again to the reduction of grain crops and the increase of legume crops. However, legume crops cannot be planted in the acreages needed with the present supply of legume seed. It would seem that the honey bee could play an important factor in any future program for reorganization of agriculture.

The Agricultural Extension Service maintained eight educational booths at the Iowa State Fair, August 25 to September 3. One of those booths featured bees, their effectiveness in pollination, their life history, and better management for honey production. The booth contained a few representative samples of honey from various sections of the state. A table in the center of the booth had a one-frame observation hive.

The interest of Fair visitors in this booth was beyond all expectation. My helpmate at one time indicated that approximately 350 people for a 15-minute period stopped more or less to read or to see what was in the booth. People generally are interested in bees whether they are city dwellers or rural dwellers. The story of pollination is certainly taking hold among land operators. Many inquiries took considerable time to answer fully, ranging from details inside the hive to a rehearsal of the pollination story.

Local beekeepers could well have a display of this nature at their local fairs or in connection with other educational efforts in their community. The story of bees can well be told as there is an interested public awaiting to hear the story.—F. B. Paddock, Ames, Iowa.

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NEBRASKA, September 1

Weather: Until about the middle of August we Nebraskans had no need to travel to the mountains in search of lovely weather. In late July three or four days of hot, dry southwesterly winds threatened serious drouth, as subsoil moisture was decidedly deficient due to light fall rains, very little snow or winter moisture, and a comparatively dry spring. However, before newspapers, radio, or people in general got around to speaking of the atmospheric conditions as a heat wave, copious rains and northerly winds gave us something else to talk about. In fact, twice in early August we started furnace fires and folks complained about what a short summer we had. Around the middle of the month true August weather began, and as this is being written there is no doubt about the weather being a heat wave with no relief in sight—temperature flirting around the 100-degree mark and better. A cool day is one in the low nineties; a hot one in the upper nineties!

Honey Crop: Fortunately the searing heat did not come until excellent crops of high quality light honey had been harvested and bees had begun to store darker, stronger-fla-

vored sweetness. Brief heat and winds in late July dried sweet clover bloom. Good rains brought it back. Given even half a chance, sweet clover is almost a miraculous nectar producer, a boon to beekeepers. We anticipate abundant fall flow of heartsease nectar which should put bees in excellent condition to winter well.

Honey Market: Movement of honey is very slow and at sharply reduced prices. Some light honey is offered on retailers' shelves at 89c per five-pound jar. Many farmer-beekeepers, newly interested in beekeeping during war years, are discouraged now and wish to sell out.

Miscellaneous: In a trade magazine published and sold by one of the largest chain store organizations in the United States, an advertiser of oleomargarine is devoting part of its advertising dollars to the promoting of a mixture of oleo and honey as a spread on bread. This advertising will reach millions of potential users. Soft butter and honey has long been a favorite in the Nielsen household as a spread for bread, hot cakes, and waffles. No sticky drip for small-fry lovers of honey.

Recently, waiting on a customer who stopped at our highway honey stand, the writer's wife was asked for a gallon of honey. Upon handing him two half-gallon glass jars, he exclaimed, "Oh, I wanted comb honey!" Believe it or not! And page Mr. Ripley.—Benj. Nielsen, Aurora, Nebraska.

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TEXAS, August 31

Weather: The highest temperature of the summer was recorded this month, with temperature of 100 or above registered locally on 22 days during August. The present summer is the hottest in six years. Rain was reported from many local widely scattered areas. However, rainfall was generally deficient, with drouth still prevailing in all major areas of the state.

Bees and Honey Crop: A general dearth of nectar and pollen prevailed during the month; colonies had greatly curtailed brood rearing and bees were much inclined to robbing. In localities where some surplus was gathered in July extracting was postponed because of robbing and colonies consumed a fair portion of the surplus. Some loss of bees from poisoning in cotton fields was reported in the Lower Rio Grande Valley and also in the main cotton belt. In some areas poisoning was averted because of lack of nectar to attract the bees to the cotton fields. At this season of the year a fairly clear picture is available of the honey crop from the major producing area. This year a few counties in the middle coastal bend and only a few widely scattered counties inland reported a near-normal crop. The crop as a whole is the smallest in many years. At this time many colonies are short on stores and beekeepers are seeking new locations for a fall flow from evergreen sumac (kinnikinnick), aster, and broomweed.

Market: At present retail grocers, wholesale grocers, and packers are well supplied with honey. Retail prices range from 24 to 30c for 1 lb. glass; 46 to 56c for 2 lb. glass, and 95c to $1 for 5 lb. glass or tin. These prices are well below those of other foods. Movement continues slow. With a short honey crop and the 1947 carry-over producers now have less honey on hand than usually. Under the circumstances improvement in movement may be expected in the fall and producers should not sell below present price levels.

Miscellaneous: Beekeepers are reminded that the last week in October is designated by the American Honey Institute as National Honey Week, at which time honey is to receive nation-wide advertising. It is suggested that state and local beekeepers' associations and their ladies' auxiliaries join in this campaign in their respective communities. Beekeepers should keep their grocers well supplied and honey placed on special display. Also the ladies should hold a public gathering some afternoon at which sandwiches, cakes, cookies, and liquid refreshments, all sweetened with honey, are served visiting housewives to demonstrate the use of honey in the home and to distribute honey recipe folders. Such adver-

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tising will go a long way toward bringing honey to the family table. Texas has a strong state beekeepers' association, ladies' auxiliary, as well as six local beekeeping associations. Surely the combined efforts of these organizations should give honey the greatest publicity Texas has ever received. Beekeepers are again reminded of the meeting of the Texas Beekeepers' Association and Ladies' Auxiliary on October 18 and 19 at College Station.—A. H. Alex, San Antonio, Texas.

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MASSACHUSETTS, September 5

Weather: The rains have kept honey plants in fine condition all summer, and while the past two or three weeks have been hot and dry the bees have been working steadily. The hot spell has caused some clustering out and swarming has resulted where the bees were crowded for storing room.

Crop: While I have not visited beekeepers outside my own territory to see what the bees are doing, our own apiaries, which cover portions of three counties, have been doing very well. There has been no need of feeding all summer, and bees are well stocked with stores. We have considerable surplus but will not extract to any extent this fall for we plan to make considerable increase in the spring when honey in the comb is more valuable than in cans.

Condition of Bees: Queens have been rearing brood heavily during late August, and goldenrod has been supplying a good crop of honey. There are several varieties of this plant beginning with a dwarf type that appears in early August followed by other larger varieties which supply a steady flow until heavy frost. Wild aster which usually blooms about September 15 should keep the queens supplied with fresh nectar until early October. Last year goldenrod and wild aster both failed to produce nectar and this caused the queens to stop brood rearing early, resulting in small clusters for winter. Last winter's losses were the heaviest we have ever known.

Miscellaneous: Poisoning of bees in the orchards was not noticeable except in one orchard where 10 out of 20 colonies were destroyed. We have had other cases in this same orchard and will not rent bees there another season.

My son, Waldron W. Newell, a senior at the University of New Hampshire, worked the past summer with Dr. C. L. Farrar at the University of Wisconsin. He is majoring in bees and plans to continue at N. H. for his M.S. degree. He has been working under Dr. J. R. Hepler and they have been doing considerable experimental work which may be of value.

My son is spending a week or two here at home helping with the last cutting of hay for our young herd of registered Guernseys. We have just finished building a bull pen for two rugged young bulls. We are located in a dairy section and plan to grow some of our own clover for the bees and feed the hay to produce milk and cream. We keep between 25 and 30 colonies here during the summer and assemble several hundred colonies here at fruit bloom time for rental for orchard pollination.

For some reason or other the bees do not appear to be disturbed by the cows, and the cows keep the grass chopped down close to the hives. One young cow appeared one evening with a badly swollen eye; perhaps she poked her nose a little too close to the entrance. We have another apiary in a sheep pasture and there has not been any trouble whatever. The sheep appear to keep a safe distance during periods of heavy flight and keep the grass and weeds under control. Weeds and grass are a problem in out-apiaries and hives must be placed on stands and the grass cut at frequent intervals. There is also some fire hazard if the grass is allowed to grow close to the hives during late fall and early spring when it is dry. Grazing the apiaries is a solution to keeping an apiary clean. It might not work with horses, for bees will sting them without provocation. Our farm work is done with a tractor and we do our mowing close to the bees in late afternoon or early morning here at Honey Grove Farms.—R. E. Newell, Medway, Mass.

MINNESOTA, September 11

Weather: The past summer has been too dry in southern Minnesota. In places like Crookston there was ample or too much rainfall. General rains have come too late to help the bees, but will be of considerable value to plants this fall.

Bees: Most beekeepers are united in saying that their colonies are in good condition for winter. The thing that needs watching, where the crop is small, is the winter feed stores. In most yards the swarming season was of short duration. An unusually large number of colonies have been requeened by swarming or supersedure.

Honey: Reports from scattered sections of the state show varied crop returns from poor to excellent. Several beekeepers say "better than 1947". A dry cold June ruined the alsike and white clover crop. Basswood yielded well for a short period. Alfalfa saved some yards, and wherever sweet clover was sufficient colonies did well. Some poor crops are reported in the northwest section as well as southern Minnesota. Weather and available pasturage made a noticeable difference between apiary yields.

Miscellaneous: In an effort to find what Minnesota beekeepers consider their most pressing problem, 14 beekeepers were asked "What one thing does American beekeeping most need?" Some very interesting answers were received, which indicate the problem most pressing in the mind of each beekeeper. It was not surprising when a majority of answers centered around the marketing of our product. "Organization and unity in marketing honey on a national basis would relieve our chaotic situation" was the expression of several answers. Another favored Government loans on honey to prevent dumping of "distress" honey on markets where there is a good crop, to the detriment of the entire country.

Other expressions of our most pressing need were: "Honey bees should be tax free in recognition of their benefit for pollination purposes"; "Honest reliable packers of honey." One beekeeper with a disease problem thought that a recognition by inspection authorities of the value of the sulfa treatment is paramount. Such expressions reflect the grass-roots problems and thinking of honey producers, and need of further championing by our beekeeping journals and organizations.

The bee and honey exhibit at our popular State Fair attracted large crowds and served a useful purpose.—Bruce Morehouse, Montevideo, Minn.

NEW YORK, September 8

Weather: After a period of extremely hot weather during the latter part of August, it has moderated somewhat, although still hot and unusually dry. Many farmers are having trouble with their plowing for fall crops, and water supplies in some sections are drastically cut.

Crop: Buckwheat has yielded a fair crop in most sections and reports indicate that a normal yield of buckwheat and goldenrod honey may be expected. The crop per colony is not now as great as in 1947 but it may grow higher if the flow continues. Goldenrod is still yielding and beekeepers consider the production of dark honey about normal.

Reports indicate that buckwheat honey is selling on the market in large lots from 9c to 13c. The market is unstable on white clover honey and the movement of product is slow. White clover in 5 lb. pails is selling for from $1.15 to $1.50, and 16 oz. glass jars for 30c at roadside stands and stores. Demand is slightly below normal.

Miscellaneous: Mr. Myers in the September issue said "Much of the present demoralization of honey prices and honey markets is caused by confused conditions within the industry". That is more or less true. As long as sugar was short, honey sold well and the market was unlimited. Honey production seemed to be an easy way to make money and so many went into producing honey. So for the past few years there has been an increase in crops and an increase in the amount of

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available sugar with a consequent lessening of the demand for honey. It is again the law of supply and demand. Unless crops are cut down or the demand built up by advertising, it will be at least 1950 before the market is on a solid basis again.

The beekeeper who packs clean, well ripened honey grades it according to the standard methods and who takes pride in his product, will win out in the long run whether he sells to his own trade, to the jobber, or to the Cooperative. But I cannot see much hope for the careless beekeeper, even if he is a member of the Cooperative Organizations, as he is the one who will pull down the organization that he himself is pledged to uphold.—Roscoe F. Wixson, Dundee, N. Y.

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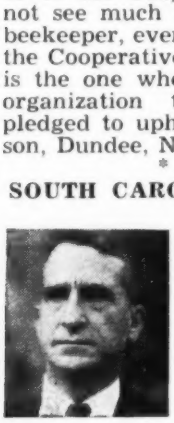
SOUTH CAROLINA, September 7



The weather has been unusually dry and the bees have had practically nothing to work on, but on September 4 it rained and it is surprising how the aster and goldenrod reacted to the rain. I am hoping that both of these plants will yield so that we can go into winter with a better crop. Most of the beekeepers have taken off their spring and summer crop and have moved the biggest part of it. This year all over the state we had spots where the bees gathered some good to extra good yields and we had other spots in the state from which the bees gathered little or no surplus. I don't believe I have ever seen the state behave as it has this time.

Crop: The reports that I hear from the sourwood section have been very good and a very good quality of sourwood honey has been gathered.

Miscellaneous: There is going to be quite a great deal of requeening done by the farmer - beekeepers. They are trying to wait until aster starts yielding so that robbing will not be quite so bad.

We have just finished up the Farmers' Week held at Clemson with a very good attendance and the Short Course was attented by over 100 beekeepers.

Now the beekeepers in the state are talking and getting ready for the Southern Conference of beekeepers which is to be held in Greenville, S. C., November 12 and 13. This will be the biggest meeting the Southern Conference has ever had, I think. E. S. Prevost, Clemson, S. C.

Don't Forget to Look Up

By A. K. Hibbard, Lorain, Ohio

As Propolis Pete says: "Live and Learn". Every season brings something new to beginners in beekeeping like myself. For instance, early this summer I found quite a large chunk of bright new comb partly filled with honey and some brood not yet sealed lying on the ground not far from one of my four hives. Evidently, I thought, some kindly neighbor had put it there thinking that the honey from it would be gathered by my bees. About a week later I found another piece like the first, and then a week or so later I found another chunk. By this time I was considerably puzzled for I could not imagine that any neighbor could be doing this repeatedly without speaking to me about it, and also why should one always deposit it in the same spot?

Perhaps, I thought, some experienced beekeeper could help me solve the mystery so I called my friend Wm. Eddy, the man whom everyone seems to think of when they have a problem connected with honey bees. He came and solved the problem. I had never thought of looking up into the tree—for who would think of a colony of bees setting up housekeeping permanently in the branches of an apple tree? Know the habits of bees from many years of experience, Mr. Eddy looked up and there they were, a good-sized swarm that had decided to try living outside. They were not doing too well for every strong wind would break off pieces of comb which fell to the ground. Pieces of honeycomb quite separated from the main cluster showed quite clearly from the ground. Perhaps it is a common experience among beekeepers but it was a new experience for me...."live and learn".

St. Louis Ideal for National Beekeepers' Convention to be held December 13 and 14.

St. Louis has long since been recognized as a leading Convention City. With over 400 conventions meeting in St. Louis annually, we have learned how to accommodate visitors and send them on their way homeward with memories of good and profitable times while in our midst.

The Hotel Statler, located at Ninth and Washington Avenues in downtown St. Louis, was selected for the convention of the National Federation because of its facilities to handle our group all under one roof. The Ballroom with seating capacity for a thousand guests has been reserved for our banquet Tuesday evening, December 14, and for our daily sessions. Smaller rooms for group meetings will be held open for our use. The Hotel has adequate space for exhibits. It is hoped that manufacturers of beeware will take advantage of the opportunity to display their equipment.

St. Louis, with its municipally-owned Lambert Airport, is an aviation center. Those who come to the convention by plane will be brought directly to the entrance of the Hotel from the Airport. And, with 28 railroads coming into St. Louis, rail transportation is superb. Highways converging on St. Louis from every direction are in excellent condition. For those who drive their own cars there is plenty of garage space within walking distance of the Hotel.

Weather in St. Louis is generally quite moderate in December, and visits to points of interest are being planned—not to interfere, of course, with the main events of the convention. While in St. Louis you will want to visit our world-famous

Shaw's Botanical Garden, where it is hoped to have displays of special interest to beekeepers. Those who associate St. Louis with the home of Budweiser will be given opportunity for an inspection tour of the great Anheuser-Busch establishment.

Glenn O. Jones, your Executive Secretary, promises a program filled with celebrities.

You are going to be glad you came to the Convention in St. Louis. We want the event to be a memorable milestone in the history of American Beekeeping. — Geo. C. Nagel, Secy.-Treas., St. Louis-St. Louis County Beekeepers' Association.

Beekeeping in Alameda County, California, has interested many people. While the back-lot or amateur beekeeper is in the majority, there are many fine apiaries in this area. In 1912 Cary W, Hartman saw the need of bringing the beekeepers together for mutual help, so he organized the Alameda County Beekeepers' Association. He was a national figure in beekeeping and took active part in the Association until his death. All persons interested in beekeeping are welcome to attend the meetings of the Association. There are 75 active members at the present time. Mr. D. L. Hopkins, who is apiary inspector for Alameda County is the president. The meetings are on the fourth Tuesday of each month in Room 219 at the Technical High School, 43rd and Broadway.

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Annotations

By Prof. A. Z. Abushady
Assoc. Mgr., International Business Associates, New York.

Winter Protection. — Mr. Rea's timely article (p. 545) lays great stress on adequate packing and protection from severe winds externally as well as on abundance of young autumn bees and plentiful stores internally. Official statistical evidence shows that adequately packed colonies in the North fared better than others. So is the evidence presented by extensive bee farmers. Such bees consume less honey during the winter and are able to move freely in comparatively dry and warm hive atmosphere. Packing with thick straw and chaff and covering with siding material seem to be quite satisfactory. Although a firm believer that the best packing for bees is bees, excessively cold winters, particularly when predicted (as the winters of 1934-'35, 1939, '40, and 1947-'48) call for reasonable precautions. These are excellently summarized by Mr. Rea for northern beekeepers.

Colony Morale. — Our editor's notes (p. 578) provide interesting reading, and his reference to the work of the Honey Bee Improvement Cooperative Association is inspiring. To my thinking and observation, colony morale is synonymous with colony vitality. Bees possessing high morale, so to speak, are those which inherently are urged to strive vigorously for survival. They courageously fight the battle of the fittest. This biological factor is the fundamental basis of colony morale, but it is enforced by personal and environmental conditions, particularly by a good queen and by a good honey locality, whereas a poor queen (or queenlessness) and a poor district greatly discourage the bees and undermine their morale. By way of illustration, I remember in particular the case of Carniolan colonies close to the sandy beach of Alexandria, Egypt, and surrounded by buildings and sand, with practically no vegetation, storing heavily from the extensive parks of Montazah Palace three miles away, whilst common bees close to those parks fared poorly. A longer daily work with some bees is not enough as a compensating factor.

Better Localities.—This inevitably leads to the question of better localities which is well answered by Mr. L. L. Andrews (p. 579) whose remarks are only two correct. "To the casual observer", he reminds us, "a location may seem mediocre while the beekeeper with years of experience will secure very satisfactory returns. It seems to be one of the inborn characteristics of most of us to feel that the other fellow has a better location than we have. We have tried to figure this out on the orange and have come to the conclusion that with all things favorable, every one will get some honey—the big colonies and the skillful operatives getting much the best of it." I am glad that Mr. Andrews is against the "let-alone" beekeepers who do not believe in any manipulation or operation, and who end by having many colonies building up on the honey flow instead of for it!

The Importation of Queen Bees.— In an instructive lecture given by Dr. Guy Morison in the Hancock Museum, Newcastle-on-Tyne (Scottish Beekeeper for August, 1948, p. 39), the lecturer pointed out that "a strain of bees which is good in one country may be of little or no use in another country with a different climate". My experience, however, is different. What matters, I claim, is to select and to introduce your standard "blood" which is the biological fountain, leaving to the suitable strains to evolve under local conditions, as a result of local adaptation. In this way "Grey blood" (Carniolans and Caucasians) for instance proved quite impressive sooner or later in all climates and in all countries.

American Bee Breeders.—I note that the Annual Meeting of the American Bee Breeders' Association will be held on November 18 and 19, 1948, at the Buena Vista Hotel, Biloxi, Mississippi. Our best wishes to the Association.

Just News

The annual convention of the Manitoba Beekeepers' Association will be held at the Marlborough Hotel in Winnipeg on Tuesday and Wednesday, October 26 and 27. Program items will include educational talks and demonstrations, business sessions, social functions, equipment displays, and a honey competition. Beekeepers and all who are interested in beekeeping are welcome.—E. C. Martin, Sec.

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The Morris County Branch of the New Jersey Beekeepers' Association will hold its third Field Meeting of the season at Bob Lecher's Poultry Farm, R. D. 1, Berkshire Valley, N. J., on Saturday, October 2. The meeting will start promptly at 2:00 p.m.—G. A. Downsbrough, Pres.

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The Texas Beekeepers' Association will hold its annual meeting October 18 and 19 at College Station, A and M College. A worth while program including out-of-state speakers is in store for those who attend.—A. W. Bulay, Pres.

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The Alberta Beekeepers' Association meeting will be held October 26 and 27 at Palliser Hotel, Calgary, Alberta.

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The South Dakota Beekeepers' Association meeting will be held November 6 at Spearfish, So. Dak.

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There will be an important meeting of the **Maine State Association of Beekeepers** at Maine State Grange Home, Augusta, Maine, October 28 at 10:00 a.m., standard time.—Edward M. Wills, Sec.

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The Kansas State Beekeepers' Association will hold its annual picnic meeting on October 3 at Tonganoxie, Kansas, which is 24 miles west of Kansas City on U. S. Highway 24 and 40.—O. A. Keene, Pres.

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The Annual Meeting of the Iowa Beekeepers' Association will be held at Ames on November 18 and 19 as an affiliated organization of the Iowa State Horticultural Society. Full details of the program will be made available in the near future.—F. B. Paddock, Extension Apiarist.

The first indoor meeting of the **Westchester County Beekeepers' Association** will be held on Sunday, October 17, at 2:30 p.m., at the Odd Fellows Hall, 20 Lockwood Avenue, New Rochelle, N. Y. Following the business meeting, instructive movies will be shown and refreshments will be served. Visitors are always welcome.—B. F. Miller, Publicity.

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The Greenville Bee Club is making plans for its part of the **Southern Beekeepers' Conference Meeting in Greenville, S. C., on November 12 and 13.** Beekeepers are expected from all counties in the state and in large numbers from other states. The members are making every effort to see that nothing is left undone for the success of the November meeting. Committees have been appointed and duties of each outlined. This Club is determined that each person who attends the conference will get the greatest amount of help possible and in addition have a most enjoyable time at the conference. The meetings will be held at the Poinsett hotel. Numerous interesting places in or near the city will add much to the pleasure of those attending. We are sure Greenville will add to her popularity as a convention city.—G. C. Gaskin, Reporter, Greenville Bee Club.

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The Georgia Beekeepers' Association will hold its annual meeting on October 21 and 22 at Moultrie, Georgia. A well rounded program has been worked out. It has been announced by J. G. Rossman of Moultrie, President, and Robert Y. Dewar of Valdosta, Secretary, that the following have been invited to attend the meeting and appear on the program: Aldren H. Hale, Hapeville, Ga.; C. J. Hudson, Jr., Atlanta, Ga.; Prof. David Dunavan, Clemson, S. C.; E. S. Prevost, Clemson, S. C.; H. D. Purswell, State Dept. of Entomology, Atlanta, Ga.; A. V. Dowling, Atlanta, Ga.; M. G. Dadant, Hamilton, Ill.; M. J. Deyell, Medina, Ohio; James I. Hambleton, Beltsville, Md.; Geo. H. Rea, Reynoldsville, Pa.; W. A. Stephen, Raleigh, N. C.; Geo. Vest, Lynchburg, Va.; E. C. Bessonet, Pres. ABA, Donaldsonville, La.;

(Continued on page 652)

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80 Years Among the Bees

By E. R. Root

Different beekeepers have different ideas as to why there was a heavy loss of bees this past winter. All would be partly right but I arrogate to myself that I have covered a longer period than any other writer on bees, and therefore feel that I can draw on all the past. I have sat for many hours at the feet of the Gamaliel of beekeeping who drew from a long experience of his own—I refer to Langstroth.

Following Langstroth I had my father who told me stories of his late discoveries in beekeeping, some of which proved to be mistakes. In later years I have travelled all over the United States visiting beekeepers to learn how they kept bees—and why. Now, in my 87th year, I propose to explain why we had such a heavy loss of bees during the past winter—the heaviest of any year since '81 and '82.

I shall give a summary of some important reasons why bees die during winter, especially those years when losses are heavier than usual. We can usually figure on about 10 years of normal winters, then comes a severe one when we wish we had taken greater precautions the previous fall. Last winter was especially trying in many northern localities because of the long period without good flying days. And many hives contained an unusual proportion of aster honey.

The real cause of winter loss is neglect. Too often beekeepers don't go into hives to see that there is plenty of honey and pollen. If the bees are flying at the entrance we conclude that the colony is strong enough. During mild winters bees will come through with this kind of treatment. Other beekeepers do not neglect their bees but prepare them to the best of their knowledge and so come to the conclusion that if they pack there will be no loss.

In some localities moderate packing is better than too much. With the former it is easy to prepare means for escape of moisture which would go into the packing and freeze—thus doing more harm than good.

On the other hand it has been proved definitely that packing properly applied will save stores and bees. The probabilities are that when colonies are supplied with stores and pollen and properly packed, bee life as well as stores will be saved.

Importance of Plenty of Pollen in the Fall

In many localities, especially where there is goldenrod and enough natural pollen to provide for early brood rearing, enough young bees will be provided to take the place of the old ones dying off.

I know of two beekeepers who lost practically all of their colonies—even though they were of proper strength, but had no pollen in the fall. These men now know they should have provided pollen substitutes in the form of patties in the late fall, and more toward spring. When this is done colonies winter without loss. Dr. Farrar of the Bee Culture Laboratory, Madison, Wisconsin, emphasized this time and time again. It is a lot of work to prepare this substitute consisting of one-fourth natural pollen, trapped at hive entrances, and three-fourths soybean flour.

Not many grasp this point. At least the two who lost 1500 colonies will not repeat their mistake.

Nosema, or You-no-see-it

Colonies at Medina, well supplied with pollen, were reduced because of the severity of the winter. The only ones that died in our yards had Nosema, a disease not apparent in the fall. Dead bees were sent to Dr. Farrar for examination and he pronounced it Nosema. What are you going to do about Nosema when you cannot see it in the fall and don't know it is present? This is one of the greatest problems to come before the beekeeping industry.

You notice above that I use the term "you-no-see-it". It is literally true that you can look at bees that have this disease and that you will not see any evidence of anything wrong. In queen packages the bees appear to be normal but the queen will be found dead on arrival, or shortly after. Of two colonies, both apparently normal, one of these colonies will succumb to Nosema, the presence of which is determined by the large number of dead bees in front of the hive.

Michigan Inspection Department Does Not Favor Sulfa Feeding.

September 9, 1948

Mr. H. H. Root
Gleanings in Bee Culture
Medina, Ohio

A letter was recently received by Director Figy of the Michigan Department of Agriculture, stating that I was quoted in the September issue of Gleanings in Bee Culture.

After talking with Mr. Figy, I immediately read my copy of Gleanings which I had received, and find that I was not quoted directly. However, the article, page 565, read as follows:

"Under conditions now existing in Michigan, sulfa feeding is permissable upon application to the Department."

If I gave the impression of this, I certainly did not intend to do so. The Department does not recognize the feeding of sulfa, and is following the same policy as we have carried out heretofore, of burning all diseased colonies found by our inspectors.

There is nothing in the Michigan Apiary law which prohibits the feeding of sulfa, and therefore a beekeeper may feed sulfa to cure his American Foulbrood colonies prior to inspection.

On February 5 of this year a hearing was held in the Director's office for the purpose of deciding whether the Department should recognize sulfa. I am also enclosing a copy of the Director's letter, which contains the Director's decision, and the Department's reasons for not recognizing sulfa. A copy of this letter was sent to all officers of the State Association, members of the Apiary Inspection Advisory Committee, and others interested, who were invited to attend.

Very truly yours,
Michigan Dept. of Agriculture
By Don P. Barrett
State Apiarist
Apiary Inspection Service

March 15, 1948

Mr. Alex Brown
3684 West Maple
Route 1
Birmingham, Michigan

Dear Mr. Brown:

I have reviewed the statements made at the meeting held on February 5, in my office of the Advisory Committee of the Michigan State Beekeepers Association, and others interested, to determine whether the feeding of sulfathiazole for the control of American Foulbrood in bees should be recognized as a treatment for the disease.

I have concluded that sulfathiazole should not be recognized by the Michigan Department of Agriculture as a treatment for American Foulbrood.

While I appreciate that many beekeepers have fed sulfa and some may have obtained apparent cures in certain cases, the preponderence of evidence indicates that sulfathiazole cannot be depended upon to definitely cure the disease.

It has been shown that spores of the disease contained in the honey are not destroyed by sulfathiazole. Such spores may be a source from which the disease can spread to other colonies, even though the colonies containing the spores may appear to be free of the disease.

Recognition of the feeding of sulfathiazole will also require inspections of the apiaries before sulfathiazole feeding is started and subsequent inspections 30 to 60 days later. The Department of Agriculture does not have the necessary funds to finance such additional inspections. It was also brought out by those present that it would be prohibitory to charge such costs to the beekeepers.

Because of the above reasons, the Department of Agriculture will not recognize the feeding of sulfathiazole as a treatment of American Foulbrood and will continue, as in the past, the policy of burning colonies found to be infected with the disease.

Very truly yours,
Michigan Dept. of Agriculture
By Charles Figy, Director

Boy Couldn't Kill Colony

By Wade Shepard, Cincinnati, Ohio

Two winters ago my neighbor had two or three hives of bees behind his garage which he had ceased to care for. A boy, thinking he would be doing the neighborhood a favor by trying to destroy them, jerked the cover off one hive and then stood at a distance and tried to smash the frames by throwing rocks at the hive. This occurred one cold February evening when a mixture of rain and sleet was falling, and I happened on the scene. Thinking the colony was done for, I bawled out the boy for being such a poor sport and left the hive as it was. The first warm day the bees were flying from this hive in good strength, and in May a beekeeper came along, put the cover back on, and bought the colony.

This, I think, is eloquent testimony to the need of ventilation rather than insulation in a hive, although the latter may help to conserve honey stores.

XUM

JUST NEWS

(Continued from page 649)

J. H. McVay, Jackson, Ala.; Paul Cutts, Pres. Fla. State Assn., Chipley, Fla.; Leslie Lewis, Pres. West Fla. Assn., Havana, Fla.; H. S. Foster, State Plant Board, Gainesville, Fla.; J. H. Girardeau, Jr., Tifton, Ga.; Harvey York, Jesup, Ga.; John Hogg, Tifton, Ga.; Scott Landrum, Sec. Clinch Co. Assn., Homerville, Ga.; John Gardner, Pres. Clinch Co. Assn., Homerville, Ga.; C. H. Herndon, Dupont, Ga.; Edgar Whiteman, Atlanta, Ga.; Carl Hartrampf, Atlanta, Ga.; M. B. Davis, Dalton, Ga.; Harold J. Clay, Washington, D. C., and Walter T. Kelley, Paducah, Ky. —Robert Y. Dewar, Sec. Georgia Beekeepers' Assn.

* * * * *

Word has been received from Mrs. Gudrun Roesch bringing more definite information relative to the disappearance of her husband, Dr. G. A. Roesch, who was known to many beekeepers in this country for his work on the division of labor in the bee colony. Because of the pressure placed in civil employes by the Nazis in Germany, he was forced to join the party about 1937. In 1940 he was ordered to the eastern part of the country to take charge of some large agricultural operations. When in late 1944 the Soviet army made its advance, there were numerous battles in the area where he was located. The last word received from Doctor Roesch was in January, 1945. Whether he was killed or captured by the Russians and placed in one of their work camps may never be known. Those who knew this promising worker in apiculture will not believe that he was a staunch Nazi, and his disappearance is a loss to beekeeping everywhere. He had a wife and two young children, now living in Hohenheim near Stuttgart.

* * * * *

John J. Metress, President of the Rockland County, N. Y., Beekeepers' Association, died suddenly on August 26 in Pearl River, New York. He was widely known among eastern beekeepers.

* * * * *

Bees and Earthworms.—All beekeepers are familiar with the great economic value of the bees in increasing agricultural crops through the pollination performed by the bees. It is interesting to note that a similar contribution is made by the lowly earthworm. A newly published book by Dr. Thomas J. Barrett "Harnessing the Earthworm" points out that 10 earthworms in a cubic foot of earth, equivalent to 1,000,000 worms per acre, may increase the crop output from 100 to 300 percent. The book is published by Bruce Humphries, Inc., of Boston, and Ryerson Press of Toronto, Canada.

* * * * *

The "Sociedad de Apicultures de El Salvador" was voted into existence June 13, 1948, at a meeting held in the National Gymnasium in San Salvador. It was pointed out that tremendous quantities of honey are lost every year because of lack of bees to gather it. Among problems discussed were recent fluctuation of honey prices, the advantage of improved methods of extracting honey, and official supervision over the importation of queen bees which might be infected with diseases that do not exist in Salvador.

* * * * *

Inter-County Beekeepers' Association Organized

Some time ago we issued an invitation to our neighboring counties to meet with us and form an Inter-County Beekeepers' Organization for the mutual assistance and benefits that would accrue from the exchange of ideas and closer cooperation of counties in inspection work and elimination of disease. This meeting was held in Marion, Ohio. There were eight counties included in the original set-up. Six counties responded and a temporary slate of officers were nominated and at the next meeting the committee for forming a constitution and by-laws reported results and their work was unanimously adopted. Much credit is to be given Harry Mesloh of Westerville and Charles Erow of Marion for their work in forming the constitution and by-laws. Mr. S. E. Bailey, our State Apiarist, and Lloyd Gardner of Delaware, have given much time and valuable help in forming the organization. The counties represented at this time are: Hardin, Wyandot, Crawford, Richland, Morrow, Delaware, and Marion. The officers are: Charles E. Erow, 285 Spencer St., Marion, President; John Danner, Galion, Vice-

(Continued on page 657)

Buy and Sell Here

CLASSIFIED ADS

Only responsible advertisers and honest advertisements will be admitted to these columns. References required from new advertisers not known to us. Rate:—15c per counted word, each insertion. Each initial, each word in names and addresses, the shortest word such as "a" and the longest word possible for the advertiser to use, as well as any number (regardless of how many figures in it), count as one word. Copy should be in by the 10th of the month preceding.

HONEY FOR SALE

WE BUY AND SELL all varieties of honey. Any quantity. Write us for best prices obtainable. The Hubbard Apiaries, Manufacturers of Bee Supplies, Onsted, Michigan.

HONEY, can or carloads, good quality. Russell D. Smalley, Beaver, Iowa.

CLOVER HONEY, No. 1 white extracted, 16c per lb. in 60's. Ask for prices on section and chunk comb. Lose Brothers, 206 E. Jefferson, Louisville, Ky.

Raspberry, milkweed, clover honey in retail packages or bulk. Write for prices. Northern Michigan Apiaries, Petoskey, Michigan.

CLOVER HONEY—White to water white, 12c lb.; in carload lots, 11c a lb. Busy Bee Farm, North Abington, Massachusetts.

NEW CROP of honey shipped daily from producer in Florida. Pure orange blossom, 5 lb., $2.25; Pure Florida comb honey, 5 lb. pail, $2.75. No C.O.D. orders, all shipments prepaid. E. R. Raley, Daytona Beach, Box 1610, Florida.

HARRIS again has the usual quality fancy clover honey that we have produced for 70 years. J. N. Harris & Son, Saint Louis, Michigan.

FOR SALE—Amber extracted honey in 5-lb. glass jars. Also white clover in new sixties. State amount wanted. L. S. Griggs, 711 Avon St., Flint 3, Mich.

COMB HONEY No. 1 clover. W. R. MOOMAW, Stone Creek, Ohio.

Amber extracted in 60's, 12c; extra dark capping meltings, 8c per lb. H. G. Quirin, Bellevue, O.

CLOVER HONEY in 60's. John Bour, Tiffin, Ohio.

FOR SALE—Clover honey, white and water white, suitable for bottling. Angus Carruthers, Route 2, Syracuse, N. Y.

CLOVER-SUMAC extracted honey in 60 lb. cans. Also some amber extracted. Prices right. Albert Hann, Glen Gardner, New Jersey.

LIGHT AMBER CLOVER and buckwheat extracted honey in 60's, also comb honey. W. C. Long, 1325 Andre St., Baltimore, Md.

HONEY AND WAX WANTED

BEEKEEPERS TAKE NOTICE—We can not guarantee honey buyers' financial responsibility, and advise all beekeepers to sell for cash only or on C.O.D. terms except where the buyer has thoroughly established his credit with the seller.

WANTED—Comb honey, also extracted. Weldon Bee Farms, Warrensburg, Mo.

WILL PAY over market price for clean yellow beeswax. Also white clover honey. Roscoe F. Wixson, Dundee, N. Y.

WANTED — White and amber honey, any amount. D. F. Treap, 316 Keenan Ave., Cuyahoga Falls, Ohio.

HONEY—Carloads or less. Mail sample, price, quantity. Konces, North Abington, Mass.

WANTED—EXTRACTED HONEY— Clover or light amber. C. H. Denny, 483 Moody St., Akron, Ohio.

CASH FOR BEESWAX. Write as to quantity and we will quote price. Muench-Kreuzer Candle Co., Inc., Syracuse, N. Y.

CASH FOR YOUR HONEY — Extracted or comb. Regular trade, send sample. 60-lb. cans furnished, if desired. W. R. Moomaw, Stone Creek, Ohio.

HONEY WANTED—All grades and varieties. Highest cash prices paid. Mail samples. State quantity. HAMILTON & COMPANY, 1360 Produce St., Los Angeles, Cal.

COMB HONEY WANTED—Advise quantity, grade, price wanted, and how packed. F. H. Hauck, P.O. Box 84, Kew Gardens, N. Y. Bank reference furnished on request.

WANTED—Clover and buckwheat honey. Send sample and state delivered price. Eastern Food Products, 115, Division Ave., Brooklyn 11, N. Y.

HONEY AND WAX WANTED. Mail Sample. Advise Quantity. BRYANT & SAWYER, 2425 Hunter St., Los Angeles 21, California.

WANTED—All grades extracted or comb honey, carloads or less. Honeymoon Products Co., 39 E. Henry St., River Rouge 18, Mich.

FOR SALE

PAPER SHIPPING CARTONS, sample mailing cases, pumps. See display advertisement. Roscoe F. Wixson, Dundee, N. Y.

QUEENBEE PAINTING OUTFIT, $1.00; colony records, 10c-15c postpaid. Southwick Apiaries, Waban, Mass.

WE CARRY a full line of ROOT QUALITY Bee Supplies. Prairie View Honey Co., 12303 12th St., Detroit 6, Mich.

WE MANUFACTURE BEEKEEPERS' SUPPLIES. Write for Price List. Marshfield Mfg. Co., Marshfield, Wisconsin.

FOR SALE — 125 shallow supers with about 600 extracting combs. Ada Berthold, 2437 Berteau Ave., Chicago, Ill., Independence 3-7595.

XUM

HONEY LABELS

Improved designs, embodying color, balance, simplicity, and distinction. Please send for free samples & prices.

C. W. AEPPLER COMPANY

Oconomowoc, Wisconsin

Michigan Headquarters for

Root QUALITY

Bee Supplies

Comb and Cutcomb Packages

Glass and Tin Honey Containers in all standard sizes

Prompt Service

Michigan Bee and Farm Supply

Box 7 Lansing 1, Mich.

Successor to M. J. Beck Co.

PATENTS Keep up with the latest U. S. Patents in the beekeeping field by reading our illustrated monthly feature "Patents on Parade". It's exclusive!

Send $2.00 for one year

SOUTHERN BEEKEEPER

Hapeville, Georgia

HONEY WANTED

Carloads and less than carloads. Mail sample and best prices in all grades.

C. W. AEPPLER COMPANY

Oconomowoc, Wisconsin

FOR SALE—Used 60-lb. cans in wood cases, two cans to case, 50c, Joseph Fekel, Vineland, N. J.

SIMPLEX TRAP clips queens without handling. $1.75 postpaid. INSTANT FRAME SPACERS, eight-nine. Specify size. $1.50 postpaid. Free circulars. George Leys, 36 Jackson St., New Rochelle, N. Y.

FOR SALE — Write for large free Bee Supply Catalog. We manufacture bee hives, foundation, tanks, and extractors. Listing many items not found in other catalogs. Walter T. Kelley Co., Paducah, Ky.

BEEKEEPERS! ATTENTION!! You will never get stung investing in VOHO Entrance Closures. Completely closing a hive in 3 seconds, yet insuring ample ventilation, should appeal to every progressive honey producer. Write, wire, or come a-riding to VOHO PRODUCTS, 2916 Orange Street, Norfolk 2, Virginia. For cash—Uppers, 80c. Lowers a buck thirty, plus postage. Cheaper too in quantity.

YOUR WAX WORKED into high quality medium brood foundation, 22c per pound; 100 pounds, $18.00. Also medium brood foundation for sale at 75c pound. Fred Peterson, Alden, Iowa.

WRITE FOR CATALOG — Quality Bee Supplies at factory prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Beekeepers' Supplies, Onsted, Mich.

BEES AND QUEENS FOR SALE

We use all possible care in accepting advertisements, but we cannot be held responsible in case disease appears among bees sold or dissatisfaction occurs. We suggest that prospective buyers ask for certificate of inspection as a matter of precaution.

CAUCASIAN QUEENS to fill your hives with gentle, high producing bees. Howard E. Crom, Box 75, Rt. 1, Ripon, Calif.

BOOKING PACKAGE BEES with Caucasian Queen for spring delivery. Write Miller & Evans, Three Rivers, Texas, Rt. 1.

ITALIAN QUEENS, $7.00 per dozen, every queen guaranteed and sent by air mail. Walter D. Leverette, Box 364, Fort Pierce, Florida.

BREWER'S LINE - BRED CAUCASIAN QUEENS —90c each; 100 and up, 75c. Brewer Brothers Apiaries, 3616 Caucasian Circle, Tampa 9, Florida.

SURPLUS 400 colonies in Florida full of bees and honey all or any part, suitable for package bees or honey production. Inspection certificate furnished. Information on request. Box 4, Gleanings, Medina, O.

CAUCASIANS. Booking orders for 1949 for package bees and queens. Lewis & Tillery Bee Co., Route One, Box 280, Greenville, Ala.

GOLDEN ITALIAN QUEENS. Extra fine and very gentle. 1 to 25, $1.00 each; 25 up, 90c each. Satisfaction guaranteed. Carolina Bee Farm, W. O. Curtis, Mgr., Graham, N. C.

FOR SALE—140 colonies, 10-frame, 5 supers each. Enough extra equipment for another 40 colonies, 5 supers each; also feeders for all. Two 1-ton heavy tanks, pump. About 300 pounds medium brood foundation. Certificate of inspection. Priced very reasonable. Luke Kill, Delphos, Ohio.

XUM

400 COLONIES with winter honey, three story 10-frame factory hives, $10.00. Also many extra supers and equipment. Inspection certificate. Victor Huddle, Greenview, Calif.

FOR SALE—600 colonies bees, 2-story, heavy with honey, $10.00 each. Also complete equipment for operation of 800 colonies. Inspection certificate furnished. Northern Michigan Apiaries, Petoskey, Michigan.

Because of serious illness in family, and my age, 86, I am going to sell my apiary and equipment. 2-frame Root extractor and supplies enough for a year. 55 colonies, nearly all 2 and 3 story. Health certificate furnished. I. H. Hoffman, Califon, N. J.

GOOD ITALIAN QUEENS, $1.00 each; 10 for $9.00. D. W. HOWELL, Shellman, Georgia.

FOR SALE: Thirty 3 and 4 story standard and Dadant hives with full equipment, $350.00. Inspection certificate furnished. Harold Goodman, 455 E. 31st St., Paterson, N. J.

FOR SALE—230 colonies of bees, three story, strong, plenty honey for winter. Inspected. M. W. Harvey, Rt. 2, Box 301, Sebastopol, Calif.

Up to 100 colonies on Modified-Dadant size frames, heavy with honey. M. E. Triplett, Lewis-Dadant dealer, Triplett, Mo.

FOR SALE—110 colonies of bees in new Jumbo hives, shallow super included. Inspected. William Kuhnen, Rt. 3, Box 62, Orland, California.

SELL TO BEST OFFER, 90 hives of bees; or lease, with valley and alfalfa locations. Good combs, young queens. Inspection certificate furnished. John C. Wharton, Thalia, Tex.

FOR SALE—52 colonies of Caucasian bees, hive and one super with summer crop on, $15.00 each. Everything new. Will be inspected. Edward McKenzie, Myersdale, Route 3, Pa.

120 colonies of bees in 10-frame standard hives, with 3 shallow extracting supers each, all hives painted and in excellent condition, $12.00 each. Inspection certificate furnished. Lloyd A. Heinz, Silverton, Ore., R. 1, Box 314.

FOR SALE: Complete 300 colony outfit. Factory made full depth ten frame equipment. Guaranteed no disease. Priced to sell. Louis F. Schuetz, Carroll, Iowa.

SUPPLIES

ATTENTION BEEKEEPERS IN MINNESOTA and adjacent states. We offer a real service on Lewis-Dadant Supplies, honey containers, and labels at a price saving to you. Top market price paid for extracted honey and beeswax. HONEY SALES COMPANY, 1806-08 NO. WASHINGTON AVE., MINNEAPOLIS, MINNESOTA.

SITUATION WANTED

EXPERIENCED commercial beekeeper available after December. Box 1048, Gleanings, Medina, Ohio.

NORTHERN BEEKEEPER, carpenter, married, no children, wishes employment in southern bee yard or shop from Jan. 1 to April 10, 1949. Living quarters expected. G. B. Ice, Box 97, Farwell, Mich.

OHIO
Distributor for the Continental Can Co.

60 lb. Tins—5 and 10 lb. Pails shipped from Chicago, St. Louis or Toledo.

We also carry carloads of **5 lb., 2 lb., 1 lb., and 8 oz. Glass Jars.**

Get our wholesale prices

Complete line of Bee Supplies Root's and Dadant's Foundation

We want carloads or less of extracted and Comb Honey. Send Sample. We pay top prices for beeswax. Any Amount.

Alexander Co.
819 Reynolds Rd. Toledo, Ohio

First Quality Italian Package Bees & Queens
John S. Shackelford
Live Oak, California

Now booking orders for 1949
Leather Colored Italian Queens and Package Bees
Write for Prices
LYNN WILLIAMS
Rt. 3 Oroville, Calif.

Three Banded
Italian Queens
Best of Quality
Prompt Delivery
1 to 25, $1.00 ea.; 25 to 50, 95c ea. 50 up, 90c ea.
Bessemer Apiaries
C.39, R. Box 12, Greensboro, N. C.

JENSEN'S

"Magnolia State" Super Quality 3-Banded Italian Queens Last call this fall

Price: 1-24, $1.00 ea.; 25-49, 95c ea.; 50 and up, 90c ea.
Disease Resistant stock queens of highest quality. Breeders and Drone Mothers thoroughly tested in the North for resistance, production, and other desirable characteristics. Isolation bred, and we highly recommend them where AFB is prevalent.
Price: 1-24, $1.30 ea.; 25-49, $1.25 ea.; 50 and up, $1.20 ea.
Many thanks for the nice business you gave us this year., and we are now booking orders for 1949 delivery.

Jensen's Apiaries
Macon Miss.
The business QUALITY built

Queens of the Golden West
Buy Western-bred queens and package bees for best results. We are now booking orders for spring 1949.
CLIFTON APIARIES
Oroville Box 684 California

Bees and Queens
Italians - Caucasians and Daughters of Queens
Bred for Resistance.
Over 30 Years a Shipper
Send for FREE Circulars
BLUE BONNET APIARIES
Weslaco R 2 Box 23 Texas

JACKSON APIARIES
Funston, Georgia
Three Band
Italian Bees and Queens
For Sale in 1949

MISCELLANEOUS

RAZOR BLADES, surgical steel double-edged for old and new razors, $1.00 per hundred postpaid, money-back guarantee. Scheffield Products Co., Box 754-G, Lansing, Michigan.

INSECTICIDES

PARADICHLOROBENZENE FOR WAX MOTH CONTROL. 2 lbs, $1.00; 5 lbs., $2.00, parcel post prepaid. Write for delivered prices on larger quantities. TRITOX CHEMICAL COMPANY, WASHINGTON, INDIANA.

BOOKS

PROFIT BY READING — NEW BOOKS on Fruit Culture, Citrus, Insecticides, Farm Machinery. Books on Farm and Garden, Child Care, Cookery, Homemaking, The West. Also Children's Books. Satisfaction or money back. Write today for FREE lists. THE HORTICULTURAL BOOK SERVICE, 200 S. Detroit Avenue, Concord, California.

WANTED

EXTRACTOR WANTED. Gulden, Baldwin Park, Calif.

SEEDS

PLANT 2-year ANISE HYSSOP plants now this fall and have full nectar bloom first season. 5 for $1.20; 20 for $4.40 postpaid. Moss packed. Write for illustrated Folder listing 72 nectar and pollen varieties of rooted plants, vines, trees, and shrubs moss packed. NICOLLET COUNTY NURSERY, St. Peter, Minn.

SEEDS OF HONEY PLANTS. Send for our list describing 45 nectar bearing plants. Pellett Gardens, Atlantic, Iowa.

PLANT CHAPMAN HONEY PLANTS. Watch your bees next June. $1.50 per 100. John Yanosik, Cranford, N. J.

MAGAZINES

DAIRY GOAT JOURNAL—introductory six months, $1.—Columbia 14, Mo.

THE INDIAN BEE JOURNAL—The only bee journal in India. Sample copy against 25c (1s 6d.) postage stamp. Yearly 7s, 6d ($1.50) International Money Order. Apply Bhupen Apiaries (Himalayas), Ramgarrh. Dist Naini Tal, U.P. India.

SOUTH AFRICA BEEKEEPING
Read the South African Bee Journal. Published every two months. Subscription 7/6 per year to the Treasurer, P.O. Box 3306, Cape Town, South Africa.

WESTERN CANADA BEEKEEPER—Official organ of the Manitoba Beekeepers' Association. One year, $1.00. 206 Donalda Bldg., Winnipeg, Canada.

THE BEE WORLD—The leading journal of Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy post free. 12 cents stamps. Membership in the Club including subscription to the paper, 10/6. The Apis Club, L. Illingsworth, The Way's End, Foxton, Royston, Herts, England.

INTERESTED in Angora Goats? Read the Sheep and Goat Raiser, Hotel Cactus, San Angelo, Texas, the only ranch magazine published serving the Angora Goat industry. Subscription — $1.50, Sample copy—fifteen cents.

Above photo shows a part of our queen yards containing over 10,000 nuclei

Italian Bees and Young Queens

Get your package bees and queens when you want them. Reserve 1949 dates now. Be safe. No deposit required for early booking.

Prices: Write for our 1949 folder with prices. It is free for your asking.

Large Queen Orders Solicited

Overbey Apiaries Bunkie, La.

JUST NEWS

(Continued from page 652)

President; and Homer W. Davis, 607 Cherry St., Marion, Ohio, Secretary and Treasurer.—Homer W. Davis, Sec. and Treas.

* * * * *

The beekeepers of Baldwin County, Alabama, organized themselves into the Baldwin County Beekeepers' Association July 16, 1948, at Robertsdale. Mr. Clay Dickman of Bay Minette was elected president; F. E. Warren of Fairhope was elected vice-president; John L. Gwaltney of Robertsdale was elected secretary-treasurer; and C. P. Biance of Bay Minette was elected advertising agent.

The purposes of the association are several: (1) To study better methods of apiary management; (2) to help members of the association to do a better job of marketing bees and honey; (3) to acquaint farmers of the area with the benefits they can get from bees; (4) to study nectar-producing plants of the area, and (5) to teach the young people of school age and the general public the value of bees.

Mr. W. M. Hodgson, district supervisor of the Mobile River Soil Conservation District, expressed interest in the new association. He expressed a desire to encourage farmers to use bees to increase their production of legume seed. Such legumes as white clover, crimson clover, sericea lespedeza, and bicolor lespedeza play a big part in controlling erosion and adding nitrogen and organic matter to the soil.

Mr. Bianco stated that he believes there is a place for a few hives of bees on most farms where good soil conservation programs have been planned and applied. He said that while the bees are gathering nectar from these soil conserving legumes they will likewise aid in pollinating the flowers so that larger production of seeds can be obtained from these plants.

The Baldwin County Beekeepers' Association is another organization that can help advance the soil and water conservation program of the Mobile River Soil Conservation District.

XUM

Requeen Now with Gooch's Italian Queens

The queen that heads your colony this fall will determine the condition of your colony next spring. That is why it is so important to requeen now to produce the honey crop next year, that you have always dreamed of.

Prices: In lots of 1-25, $1.00; 26-50, 90c; 51-100, 85c.
Profitable Beekeeping Begins with Gooch's Queens

Jesse E. Gooch & Sons Rt. 3 Pine Bluff, Ark.

Better Bred Queens Three Band Italians

We thank our many customers for their patronage this season.
We are now booking orders for 1949.

Calvert Apiaries Calvert, Alabama

A Continually Improved Strain of Disease Resistent Queens is Available from the Iowa Beekeepers' Association

	1 to 9	10 to 49	50 to 99	100 and up
2 lb. pkgs. with DR Queens	$5.20 ea.	$5.00 ea.	$4.75 ea.	$4.65 ea.
3 lb. pkgs. with DR Queens	6.20 ea.	6.00 ea.	5.85 ea.	5.75 ea.
DR Queens	1.65 ea.	1.50 ea.	1.40 ea.	1.35 ea.

Iowa Beekeepers' Association

State House Des Moines, Iowa

Honey Girl Apiaries

Package Bees and Queens when you want them

Italian Bees and Queens

	1 to 9	10 to 49	50 to 99	100-up
2 lb. pkg. with queen (each)	$4.50	$4.25	$4.15	$4.00
3 lb. pkg. with queen (each)	5.65	5.40	5.30	5.15
4 lb. pkg. with queen (each)	6.80	6.55	6.45	6.30

Extra Queen, Untested, $1.35. Tested, $2.00. Any quantity.

W. E. Case, Proprietor Moreauville, La.

Ship Your
HONEY & BEESWAX
to us. Top prices paid, prompt remittance. Also welcome your old comb shipments to be rendered into wax at very nominal charge.

THE FRED. W. MUTH CO.
229 Walnut Street
CINCINNATI 2, OHIO

Top Quality
Italian Queens
Summer Prices
1-10, $1.00 11-30, 90c
31-74, 85c 75 and over, 75c

Girardeau Apiaries
Tifton, Georgia

STOLLER'S Fine Quality Clover Honey, 1948 crop, excellent for bottling. Stoller Honey Farms, Latty, Ohio.

Italian Queens

From Proven
High Producing Stock

Each 75c

Clipped and Airmail
at no extra cost

We wish to thank our customers for their consideration and co-operation. For you we wish a most successful season.

Geo. A. Hummer & Sons
Established 1892
Prairie Point, Mississippi
Wire or phone Macon, Mississippi

We Thank You,
One and All . . .

This has been the most satisfactory season from a delivery standpoint that we have ever had. Sure there was rain, even floods and wind, as well as other difficulties in connection with securing bees, such as feeding, detours, rough roads—even the trains did not run for several days from our shipping point, causing us more travel to other points where we could ship. Even so, we made the season with little delay and finished on schedule.

We are working now to supply you next year. Supplies are being ordered that there will be no holdup when the time comes.

Place your orders after December 1st for next spring delivery.

Rossman & Long
P. O. Box 133 Moultrie, Ga.

Requeen with
Quality Caucasians that Guarantee to Please
Do Not trust the welfare of your colonies to failing queens. A strong colony means profit to you.
Queens, each, $1.00
Health certificate furnished with every shipment and live delivery guaranteed.
Pine Bluff Bee Farms Route 3 Pine Bluff, Ark.
(Caucasian Branch — Jesse E. Gooch & Sons)

Package Bees with Queens

While They Last

Italians

	1 to 9	10 to 49	50 to 99	100-up
2 lb. pkg. with queen (each)	$4.50	$4.25	$4.15	$4.00
3 lb. pkg. with queen (each)	5.65	5.40	5.30	5.15
4 lb. pkg. with queen (each)	6.80	6.55	6.45	6.30
Queens (each) $1.35	Tested	$2.00		

By Express — We Serve to Serve Again

May we reserve the date you desire for your shipment?

Sunny South Apiaries Marksville, La.

I. Clark, Proprietor

XUM

KNIGHT'S

3-banded

Leather Colored Italian Bees

The Best Honey Gatherers

We are now booking orders for package bees for 1949 Delivery

S. M. Champion

Hayneville, Alabama

(Successor in part to Jasper Knight & Sons)

LEAHY'S

Quality Bee Hives

A name to know when you need bee hives, tinware, or glassware.

First quality products

Prompt shipment

Priced on present manufacturing costs.

Satisfaction guaranteed, or purchase price refunded.

Write for our special price list

Leahy Mfg. Co.

Higginsville, Mo.

The John M. Davis Strain Italian Queens

Bred the Davis Way

These queens are reared in Nucs with three full-depth standard frames of brood, bees, and honey; no baby nucs used. They are well fed from time of hatching until mated and laying, making stronger, larger, fully developed queens. Try them; you'll like them or your money refunded.

Price $1.00 each

Write for quantity prices

Little's Apiaries

P. O. Box 122

Shelbyville, Tenn.

Protect your future. Buy your extra Savings Bonds now.

TOO LATE TO CLASSIFY

FOR SALE—370 colonies bees, 300 in 2 stories, 70 in singles. All heavy with honey. Disease free. Excluder, 2 super combs. Equipment newly painted and in perfect shape. Winter cases for 200. 45-frame extractor, 3500-pound tank. Honey pump, power uncapping knife, etc. Make best offer in first letter. Howard Sadler, Delphos, Ohio.

WANTED—comb honey within hundred miles. Will pick up. State kind and price. David J. Johnson, Clarendon, Pa.

Wanted . . . .

1890 bound volume of Gleanings in Bee Culture. If in good condition, will pay well. Or will make an offer on any loose copies for 1890. Write:

Gleanings in Bee Culture
Medina, Ohio.

Wax Melter with V-ridge Construction

Save all of the honey of your cappings - Melts at low temperature as fast as uncapped. Welded construction stainless steel, aluminum, or galvanized.

A. H. Schmidt White Bear Lake, Minn.

Manufacturer of Metal Bee Hives

A TALK TO BEEKEEPERS

(Continued from page 633)

We have conducted a number of experiments in packing some hives with building paper and chaff, leaving an equal number of colonies unpacked. The colonies in packed hives consumed about five pounds less stores per colony during the winter than the unpacked colonies. However, according to records we have available on experiments tried, the colonies without packing had more brood in the spring than the colonies that were packed.

It seems that beekeepers in various regions of the United States and Canada have to work out a system that meets their needs for wintering bees. If you are having success with the method you are using, stick to it. Do not experiment on too large a scale. We should have said that the bottom entrance should be made mouse-proof—that is, the entrance restricted down to about five sixteenths inch to exclude mice. Some beekeepers use a quarter inch screen over each entrance to keep mice out.

Hives Facing the South

Within recent months I mentioned the advantage of facing hives to the South. Some beekeepers take exception to this. I still believe that hives in the North should have the entrances facing the South. I suppose hives in the southern hemisphere would be faced to the North to take advantage of the sun.

As mentioned previously, the winter cluster forms near the front of the hive over the entrance. The southern sun will warm up the front of the hive and the bees can get out easily, whereas if the hive was faced North the bees might not get out of the hive so easily. A few years ago we had some hives facing East. When we examined the hives on a sunny day we found the bees crowded up towards the south side of the hive, attempting to get out of a small opening in the southeast corner of the hive where the sun was beating down in the afternoon. Had the hives been facing South the bees would have gotten out of the hive easily for a good cleansing flight.

Leaving Supers at Outyards

It is difficult to select outapiaries with an easy approach or driveway that will enable a car to be driven to the yard during the spring months. It appears to be an advantage to pile a few supers, one for each colony, at the outyard, covering them well to make them mouse-proof, so that they may be available to put on the following spring.

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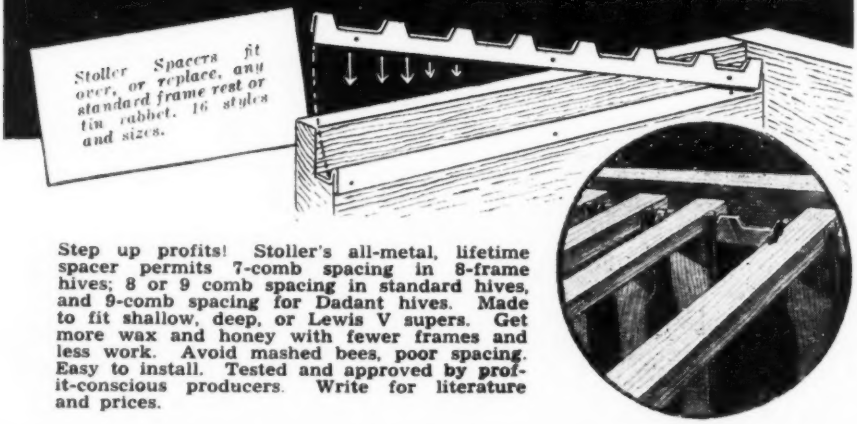

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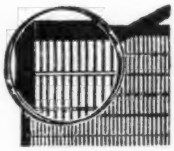

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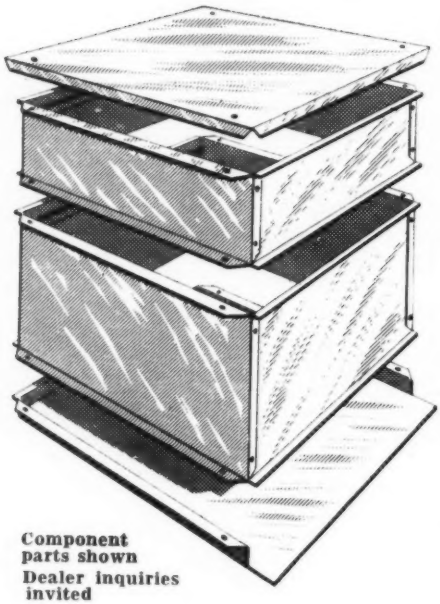

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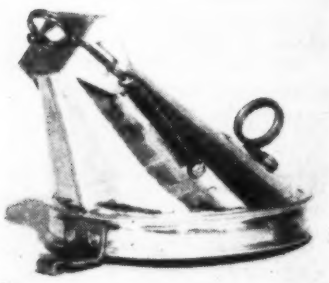

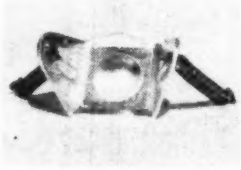

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Price of Honey

October 21, 1948

The following figures represent an expression of current prices from beekeepers and honey packers over the country. They are based on several reports from each state averaged with the reports in the region. Where insufficient information is returned prices have been omitted from the chart. Where three figures appear on the chart the first figure represents the low, the middle figure represents the average, and the third figure the high price.

	No. Atlantic	South	No. Central	Mid West	So. West
Bulk Honey					
Table Grade	10-13-19c	8-12-16c	10-13-18c	8-10-12c	8-12c
Industrial Grade	9-11-12	6-12	8-10-13	7-10	7-12
Price to Grocers					
5 lb. jar or can	14-20-25	18-26	14-19-28	13-16-19	
3 lb. jar (cs. 12's)	20-28				
2 lb. jar (cs. 12's)	21-28	23-28		17-24	
1 lb. jar (cs. 24's)	22-26-30	25-26-29	20-28-30	20-22-25	
Comb Honey	$7-$8-$11	$8.50	$9-$10	$6-$9	
Retail Price					
60 lb. can	15-35	17-20	15-18-20	13-14-16	10-16-25
5 lb. jar or can	17-26-33	19-25-35	18-25-35	15-21-27	18-25-30
3 lb. jar	20-36		25-36		
2 lb. jar	25-38	22-30	25-30-38	23-28	23-28
1 lb. jar	29-35-50	24-32-35	29-33-40	25-31-39	27-44
Honey Sales	Slow to Fair	Fair	Slow to Fair	Fair	Fair
Estimated Crop					
Conditions based on normal (%)	76	75	70	79	75

The average of the prices reported this month compared with those of a month ago show no material change. A few comments from beekeepers are as follows:

Iowa: "Honey prices strengthening."

Iowa: "Demand for honey improved, some inclined to cut prices."

New York: "Until prices get settled again it is hard to be accurate at to price."

North Carolina: "Beekeepers have moved their crop and a few are buying honey to supply their trade."

Nebraska: "Demand about zero."

Arizona: "Left all honey with bees. My first crop failure in 20 years."

The general commodity market price as reported in the Journal of Commerce for some 30 sensitive commodities stands at 282 as compared with 291 a month ago. 1938 is figured at 100.

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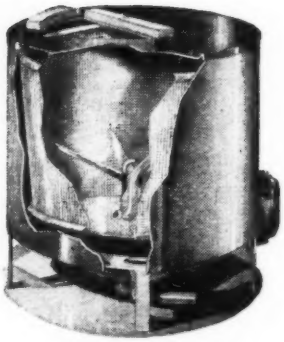

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STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, OF GLEANINGS IN BEE CULTURE, PUBLISHED MONTHLY AT MEDINA, OHIO, FOR OCTOBER 1, 1947.

State of Ohio, County of Medina ss:

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Alan I. Root, who, having been duly sworn according to law, deposes and says that he is Business Manager of Gleanings in Bee Culture, and that the following is to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of— Post office address—

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Editors: E. R. Root and M. J. Deyell, Medina, Ohio.

Business Manager: Alan I. Root, Medina, Ohio.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

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4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom the trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

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ALAN I. ROOT, Business Manager.

Sworn to and subscribed before me this 30th day of September, 1948.

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